

RA
413.7
.A4
I58
1988

ORD-14-85001
85-001-02-TJW84...

INTERIM REPORT TO CONGRESS:

EVALUATION OF THE SOCIAL/HMO DEMONSTRATION

CONTENTS

EXECUTIVE SUMMARY.....	I
I. BACKGROUND	
A. CONGRESSIONAL MANDATE.....	1
B. WHAT IS THE S/HMO CONCEPT?.....	4
II. S/HMO ORGANIZATION AND MANAGEMENT	
TO WHAT EXTENT HAVE THE S/HMOS BEEN SUCCESSFUL IN CONSOLIDATING ACUTE CARE HEALTH AND CHRONIC CARE SERVICES?.....	10
III. S/HMO FINANCIAL PERFORMANCE AND UTILIZATION EXPERIENCE	
WHAT HAS BEEN THE IMPACT OF S/HMO ORGANIZATION AND MANAGEMENT ON FINANCIAL PERFORMANCE AND BENEFICIARIES' USE OF SERVICES?.....	14
IV. MEDICARE BENEFICIARY ENROLLMENT IN S/HMOS	
HAVE THE S/HMOS BEEN ABLE TO ENROLL A CROSS- SECTION OF THE ELDERLY POPULATION, INCLUDING MEDICARE BENEFICIARIES ELIGIBLE FOR MEDICAID AND PERSONS "AT RISK" OF INSTITUTIONALIZATION? HOW DID PRODUCT DESIGN, COMPETITIVE MARKET FORCES, AND MARKETING PRACTICES AFFECT S/HMO ENROLLMENTS?.....	17
V. HEALTH PLAN AWARENESS AND SELECTION BY MEDICARE BENEFICIARIES	
HOW AWARE WERE MEDICARE BENEFICIARIES OF THE S/HMO ALTERNATIVE TO FEE-FOR-SERVICE MEDICARE AND TEFRA RISK-BASED PREPAID HEALTH PLANS? HOW DID BENEFICIARIES BECOME AWARE OF THE S/HMO ALTERNATIVE? WHY DID BENEFICIARIES CHOOSE TO JOIN A S/HMO?.....	25

VI.	CASE MANAGEMENT IN THE S/HMO DEMONSTRATIONS	
A.	WHAT ARE THE EFFECTS OF CASE-MANAGEMENT ON ENROLLEES' ELIGIBILITY AND USE OF THE S/HMOS' CHRONIC CARE BENEFITS?.....	32
B.	WHAT WERE THE PRIMARY ROLES OF S/HMO CASE MANAGERS? DID S/HMO CASE MANAGERS PERFORM SIMILARLY ACROSS SITES? HOW MUCH DID S/HMO CASE MANAGEMENT COST?.....	35
VII.	SUMMARY AND CONCLUSIONS.....	38
VIII.	REFERENCES CITED.....	42

TECHNICAL APPENDICES

APPENDIX A	EVALUATION DESIGN REPORT
APPENDIX B, CHAPTER 1	EVALUATION PROGRESS REPORT, 1986-1987
CHAPTER 2	S/HMO ORGANIZATION AND MANAGEMENT
CHAPTER 3	S/HMO FINANCIAL PERFORMANCE
CHAPTER 4	MEDICARE BENEFICIARY ENROLLMENT IN S/HMOS
CHAPTER 5	HEALTH PLAN AWARENESS AND SELECTION BY MEDICARE BENEFICIARIES
CHAPTER 6	CASE MANAGEMENT IN THE S/HMO DEMONSTRATIONS

EXECUTIVE SUMMARY

This report has been prepared pursuant to Section 2355 of Public Law 98-369, the Deficit Reduction Act of 1984. Section 2355 mandated the Secretary of Health and Human Services to approve, with appropriate terms and conditions, applications or protocols submitted to waive certain requirements of Titles XVIII and XIX of the Social Security Act so as to demonstrate the concept of a social health maintenance organization (S/HMO). Furthermore, Congress mandated that these demonstrations occur with organizations described in Health Care Financing Administration Project No. 18-P-970604/1 by the University Health Policy Consortium, Brandeis University. These organizations are:

- o Kaiser Permanente - Northwest Region (KP), Medicare Plus II, Portland, Oregon
- o Metropolitan Jewish Geriatric Center, Elderplan, Brooklyn, New York
- o Ebenezer Society-Group Health, Inc., Seniors Plus, Minneapolis, Minnesota
- o Senior Care Action Network, SCAN Health Plan (SHP), Long Beach, California.

The statutory language states four salient features of the S/HMO model:

- o "...provides for the integration of health and social services under the direct financial management of a provider of services."
- o "...all Medicare services will be provided by or under arrangements made by the organization at a fixed annual capitation rate for Medicare of 100 percent of the adjusted average per capita cost [AAPCC]."
- o "...Medicaid services will be provided at a rate approved by the Secretary."
- o "...all payors will share risk for no more than 2 years [the first 30 months of the demonstration], with the organization being at full risk in the third year [the last 12 months of the demonstration]."

Federal interest in the S/HMO concept grew out of three issues affecting delivery of health and long-term care services to older persons (Leutz, et al., 1985):

- o The growth of risk-based, managed care Medicare alternatives (i.e., health maintenance organizations and competitive medical plans) that encourage health care providers to work together efficiently.
- o The absence of appropriate insurance mechanisms for chronic (i.e., the need for the development of long-term care insurance options).
- o The under-development of home and community-based chronic care services, and the fragmented arrangements for managing the care of functionally impaired older persons across the full range of acute and long-term care services.

The S/HMO model offers aged Medicare beneficiaries a prepaid health care alternative to standard fee-for-service Medicare coverage and extends the typical benefit package offered by Medicare risk-based HMO and CMP contractors to include both home and community-based and institutional chronic care services.

Promotion of the S/HMO concept through changes in Medicare eligibility, reimbursement, or coverage policies, associated especially with risk-based contracting with HMOs and CMPS under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) requires knowledge about the model's operational feasibility and cost-effectiveness. To this end, Congress also specified that HCFA sponsor an evaluation of the S/HMO demonstrations. HCFA's Office of Demonstrations and Evaluations contracted with the Institute for Health and Aging, University of California, San Francisco to conduct this evaluation on September 17, 1985. The period of performance for this evaluation is 50 months.

Section 2355 directs HCFA to forward the evaluator's findings to Congress no later than 42 months after the enactment of P.L. 98-369 or January 1988. Since one of the four demonstrations began operations January 1, 1985 and the other three sites, March 1, 1985, this report examines the S/HMO concept during the first 30 months of the demonstration.

During this 30 month period, HCFA and States consented to share financial risk with the four sites. For three of the sites (i.e., Seniors Plus, Elderplan, and SHP), risk-sharing included expenditures for standard Medicare Part A and Part B acute care-related services, and the unique S/HMO chronic care benefit package. Risk-sharing with Kaiser Portland's Medicare Plus II related only to chronic care services and the State did not participate.

This interim report does not provide insights into the performance of these demonstrations in the absence of risk-sharing. For this reason, HCFA cannot recommend specific changes in the Medicare program that could facilitate the growth of the S/HMO concept. All four of the demonstration sites are now at full risk. Section 4018 (b) of Public Law 100-203, the Omnibus Budget Reconciliation Act of 1987, extended the demonstration until September 30, 1992 and required a final report by March 31, 1993.

This report emphasizes issues related to the S/HMO concept's operational feasibility, rather than the model's cost-effectiveness (e.g., what would the acute and chronic care costs for S/HMO enrollees have been if these persons had remained in fee-for-service or joined a competing Medicare HMO risk-contractor?). Health care utilization data is still being compiled for fee-for-service functionally impaired Medicare beneficiaries who serve as the principal comparison group to functionally impaired S/HMO enrollees. Thus, this report does not include analyses of demonstration effects on beneficiaries' use of acute care and chronic care services (i.e., to estimate what the utilization experience of impaired S/HMO enrollees would have been in the absence of the demonstration).

This report presents analyses related to the following questions:

- o To what extent have the S/HMOs been successful in consolidating acute health care and chronic care services?
- o What has been the impact of S/HMO organization and management on services utilization and financial performance?
- o How effective have S/HMO marketing practices been in the demonstration sites enrolling a broad cross-section of the elderly population, including Medicaid eligible Medicare beneficiaries and persons "at risk" of institutionalization? How did product design, competitive market forces, and marketing practices affect S/HMO enrollments?
- o How aware were Medicare beneficiaries of the S/HMO as an alternative to fee-for-service Medicare coverage and coverage available through TEFRA risk-based prepaid health plans? How did beneficiaries become aware of the S/HMO alternative? Why did beneficiaries choose to join a S/HMO?
- o What were the effects of case management on enrollees' eligibility for and use of the S/HMOs' chronic care benefits? What were the primary roles of S/HMO case managers? Did S/HMO case managers perform the same tasks across the four demonstration sites? How much did S/HMO case management cost?

The most important observations in this report are:

- o From an organizing and management perspective, developing the S/HMO concept in the context of, or in association with, a mature health maintenance organization committed to serving Medicare beneficiaries (e.g., TEFRA HMOs with a minimum of 5000 aged Medicare beneficiaries) is less costly and administratively less complicated than having long term care providers (e.g., organizations that offer comprehensive multi-level residential and home and community-based long-term care services) first develop the acute care services infrastructure necessary to support S/HMO chronic care benefits. However, results of the yet to be completed cost-effectiveness analysis may modify this interim conclusion.
- o For mature HMOs that already have a TEFRA HMO or CMP contract, there appear to be two principal organizing questions: (1) how to simultaneously market more than one Medicare prepaid health plan and (2) how to integrate the chronic care services component of the S/HMO concept with existing acute care delivery systems. In its marketing approach, KP purposively minimized the problem of Medicare product competition. Seniors Plus did experience enrollment problems that can be associated with its sponsor, Group Health, Inc., dually marketing the S/HMO and a TEFRA HMO. With much concerted effort on the part of S/HMO staff, problems in services integration were not encountered.
- o Long term care organizations interested in developing the S/HMO concept need to fully understand the considerable staff and financial resources and prepaid acute health care managerial expertise that is necessary for successful S/HMO start-up. Based on Elderplan's and SHP's experience, long term care providers considering initiating a S/HMO-type venture should anticipate the need for external assistance to share the financial risks and management challenges of such an organizational innovation.
- o All S/HMOs were able to contain hospital use at or below their own budget projections, and at levels below that provided to fee-for-service Medicare beneficiaries in their communities.
- o All the S/HMOs lost substantially more money than they expected to lose during the developmental phase of this demonstration. At three sites (i.e., Elderplan, SHP, and Seniors Plus), financial losses were primarily attributable to high start-up and administrative costs, coupled with much lower than expected enrollments

(i.e., considerably less revenue than projected). At KP's Medicare Plus II, losses were related to providing Medicare covered services and not to providing the S/HMO chronic care services benefits where a surplus resulted.

- o As designed and marketed, with the exception of KP, the S/HMOs experienced difficulties in competing with available prepaid health plan Medicare alternatives. Factors negatively affecting the S/HMOs' competitive position were price, limitations in advertising budgets, difficulties in developing marketing strategies that attempted to use the chronic care services component of the S/HMO benefit package to differentiate the product from high option TEFRA HMO alternatives, and an externally imposed capacity constraint on enrolling nursing home certifiable persons.
- o With the exception of Elderplan, the demonstration sites appear to have enrolled a representative cross-section of Medicare beneficiaries as evidenced by their members functional impairment levels compared to the functional status of fee-for-service beneficiaries in their market areas. The percentage of severely, and especially, moderately impaired persons who enrolled in three of the four demonstrations was greater than or equal to an estimated distribution of functional impairment among fee-for-service beneficiaries in Portland, Long Beach, and the Twin Cities.
- o Compared to persons who could have enrolled in the S/HMOs but decided to join TEFRA competitors instead, based upon impairment levels, the S/HMOs appear to have experienced an adverse selection relative to their competition.

This finding has direct implications for how the availability of chronic care services affects marketing the S/HMO. Since the S/HMOs are also offering expanded services (e.g., prescription drugs, eyeglasses), to the extent that they further promote the unique chronic care benefits package as a means of differentiating themselves from TEFRA HMO competition, they risk increasing the probability of attracting disproportionate numbers of severely or moderately impaired Medicare beneficiaries (i.e., encourage adverse selection).

- o Compared to TEFRA HMO enrollees who tended to join prepaid health plans based on financial considerations, Medicare beneficiaries clearly tended to join the S/HMO to obtain more benefits.

The evaluation has no direct empirical evidence as to whether Medicare beneficiaries joining a S/HMO primarily because of additional benefits were especially attracted because of chronic care services availability or because of expanded services not covered by Medicare or available HMO alternatives (e.g., prescription drugs). However, data on the likelihood of nursing home admission and use of community-based chronic care services prior to enrollment and the likelihood of purchasing long term care insurance would seem to indicate that the availability of the chronic care services component of the S/HMO benefit package was not a primary contributor to the enrollment decision.

- o The finding that an estimated 49 to 62 percent of TEFRA HMO enrollees and 29 to 38 percent of fee-for-service Medicare beneficiaries surveyed believed they had chronic care services available under their current coverage is evidence of possible confusion over the coverage limits of standard Medicare SNF and home health benefits.
- o Given differences among the sites in the selection of eligibility criteria and in the procedures for conducting health and functional status assessments, the four S/HMOs vary considerably in the groups of S/HMO enrollees that have been permitted access to chronic care services.
- o To date, it appears that S/HMO case managers have been able to monitor and allocate chronic care benefits with considerable success. Few functionally impaired enrollees using chronic care services have exhausted these benefits. However, further analysis is needed on the relationship between the use of chronic care services and the actual clinical needs of S/HMO enrollees eligible to receive these services.

- o Level of expenditures for S/HMO chronic care benefits result from a complex interaction between managing acute care utilization, applying assessment criteria for determining enrollees' eligibility to receive chronic care benefits, negotiating favorable payment rates for institutional and in-home chronic care services, and allocating chronic care benefits balancing the use of informal caregivers with formal services, capped by a dollar limit.

In summary, the experience of the four S/HMO projects to date indicates that the easiest to implement test of the S/HMO concept would occur in association with financially viable, mature HMOs or CMPs that have demonstrated a commitment to serve the Medicare population through sustained growth of Medicare enrollees. A financially viable prepaid health plan appears to be a necessary condition for successfully implementing the S/HMO concept. Testing the integration of the chronic care services component of the S/HMO model in such an organizational environment minimizes the need to differentiate the negative impacts of start-up related problems associated with new acute care prepaid health plans from program impacts directly related to the unique organizing and financing characteristics of a S/HMO.

I. Background

A. Congressional Mandate

This report has been prepared pursuant to Section 2355 of Public Law 98-369, the Deficit Reduction Act of 1984. Section 2355 required the Secretary of Health and Human Services to approve, with appropriate terms and conditions, applications or protocols submitted to waive certain requirements of titles XVIII and XIX of the Social Security Act so as to demonstrate the concept of a social health maintenance organization (S/HMO). Furthermore, Congress mandated that these demonstrations occur with organizations described in Health Care Financing Administration (HCFA) Project No. 18-P-970604/1 with the University Health Policy Consortium, Brandeis University. These organizations are:

- o Kaiser Permanente - Northwest Region (KP), Medicare Plus II, Portland, Oregon
- o Metropolitan Jewish Geriatric Center, Elderplan, Brooklyn, New York
- o Ebenezer Society-Group Health, Inc., Seniors Plus, Minneapolis, Minnesota
- o Senior Care Action Network, SCAN Health Plan (SHP), Long Beach, California.

The statutory language states four salient features of the S/HMO model:

- o "...provides for the integration of health and social services under the direct financial management of a provider of services."
- o "...all Medicare services will be provided by or under arrangements made by the organization at a fixed annual capitation rate for Medicare of 100 percent of the adjusted average per capita cost (AAPCC)."
- o "...Medicaid services will be provided at a rate approved by the Secretary."
- o "...all payors will share risk for no more than 2 years [the first 30 months of the demonstration] with the organization being at full risk in the third year [the last 12 months of the demonstration]."

Federal interest in the S/HMO concept grew out of three issues affecting delivery of health and long-term care services to older persons (Leutz, et al., 1985):

- o The growth of risk-based, managed care Medicare alternatives (i.e., health maintenance organizations and competitive medical plans) that encourage health care providers to work together efficiently.
- o The absence of appropriate insurance mechanisms for chronic care (i.e., the need for the development of long-term care insurance options).
- o The under-development of home and community-based chronic care services, and the fragmented arrangements for managing the care of functionally impaired older persons across the full range of acute and long-term care services.

The S/HMO model offers aged Medicare beneficiaries a prepaid health care alternative to standard fee-for-service Medicare coverage and extends the typical benefit package offered by Medicare risk-based HMO and CMP contractors to include both home and community-based and institutional chronic care services.

Promotion of the S/HMO concept through changes in Medicare eligibility, reimbursement, or coverage policies, associated especially with risk-based contracting with HMOs and CMPS under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) requires knowledge about the model's operational feasibility and cost-effectiveness. To this end, Congress also specified that HCFA sponsor an evaluation of the S/HMO demonstrations. HCFA's Office of Demonstrations and Evaluations contracted with the Institute for Health and Aging, University of California, San Francisco to conduct this evaluation on September 17, 1985. The period of performance for this evaluation is 50 months.

This report is based on findings from this HCFA-sponsored evaluation. Appendix A, provided for reference purposes, is the evaluation's design report. It details study issues, hypotheses, data collection methods, and analytical approaches. Appendix B includes a progress report (Chapter 1), summarizing specific accomplishments and modifications to this study design to date and Chapters 2 through 6 which are detailed, technical analyses supporting the results contained in this report.

Section 2355 directs HCFA to forward the evaluator's findings to Congress no later than 42 months after the enactment of P.L. 98-369 or January 1988. Since one of the four demonstrations began operations January 1, 1985 and the other three sites, March 1, 1985, this report examines the S/HMO concept during the first 30 months of this 42 month demonstration. During this 30 month period, HCFA and States consented to share financial risk with the four sites. For three of the sites (i.e., Seniors Plus, Elderplan, and SHP), risk-sharing included expenditures for standard Medicare Part A and Part B acute care-related services, and the unique S/HMO chronic care benefit package. Risk-sharing with KP's Medicare Plus II related only to chronic care services, and the State did not participate.

This interim report does not provide insights into the performance of these demonstrations in the absence of risk-sharing. All four of the demonstration sites are now at full risk for the last 12 months of the Congressionally mandated demonstration period. Section 4018 (b) of Public Law 100-203, the Omnibus Budget Reconciliation Act of 1987, extended the demonstration until September 30, 1992 and required a final report by March 31, 1993.

This report presents analyses related to the following questions:

- o To what extent have the S/HMOs been successful in consolidating acute health care and chronic care services?
- o What has been the impact of S/HMO organization and management on services utilization and financial performance?
- o How effective have the S/HMOs been in enrolling a broad cross-section of the elderly population, including Medicaid eligible Medicare beneficiaries and persons "at risk" of institutionalization? How did product design, competitive market forces, and marketing practices affect S/HMO enrollments?
- o How aware were Medicare beneficiaries of the S/HMO alternative to fee-for-service Medicare and Tax Equity and Fiscal Responsibility Act (TEFRA) risk-based prepaid health plans? How did beneficiaries become aware of the S/HMO alternative? Why did beneficiaries choose to join a S/HMO ?

- o What were the effects of case management on enrollees' eligibility for and use of the S/HMOs' chronic care benefits? What were the primary roles of S/HMO case managers? Did S/HMO case managers perform the same tasks across the four demonstration sites? How much did S/HMO case management cost?

This report emphasizes issues related to the S/HMO concept's operational feasibility, rather than the model's cost-effectiveness (e.g., what would the acute and chronic care costs for S/HMO enrollees have been if these persons had remained in fee-for-service or joined a competing Medicare HMO risk-contractor?). The evaluator is only halfway through executing its quasi-experimental research design, collecting health and functional status and health care utilization data from fee-for-service functionally impaired Medicare beneficiaries who serve as the principal comparison group to functionally impaired S/HMO enrollees. Thus, this report does not include analyses of demonstration effects on beneficiaries' use of acute care and chronic care services (i.e., to estimate what the utilization experience of impaired S/HMO enrollees would have been in the absence of the demonstration).

B. What is the S/HMO Concept?

In spring 1980, HCFA awarded a grant to the University Health Policy Consortium (UHPC), Brandeis University to design ways to organize and finance the S/HMO concept. As conceived by UHPC staff, the S/HMO was "...attempting to extend the HMO acute care financing and delivery model to include chronic care management and services" (Greenberg, et al., 1984).

All four S/HMO demonstration sites test essentially the same protocol that includes:

- o Common health and functional status assessment instruments to assist in determining an enrollee's eligibility for chronic care services.
- o A core benefit package of acute care and chronic care services.
- o Capitated reimbursement from the Medicare program based on modifying the present adjusted average per capita cost (AAPCC) formula used to reimburse risk-contract health maintenance organizations (HMOs) and competitive medical plans (CMPs).
- o Risk-sharing arrangements between the demonstration sites, HCFA, and State Medicaid programs to reduce the potential impact on sponsoring organizations of financial losses attributable to undertaking organizational innovation with uncertain outcomes.

A S/HMO is different from an HMO or CMP participating as a Medicare risk-contractor under provisions of TEFRA with respect to:

- o Benefit Packages:

Risk-contract HMOs and CMPs do not provide Medicare enrollees community-based chronic care services. The essence of the S/HMO concept is providing chronic care benefits to functionally impaired beneficiaries in a prepaid health care environment.

Both the S/HMOs and TEFRA HMOs and CMPs must provide standard Medicare skilled nursing facility (SNF) and home health benefits. Some TEFRA contractors enhance the Medicare SNF benefit by providing additional days beyond Medicare coverage. Nevertheless, these nursing home and home health services still are generally associated with a hospital stay and are not related to chronic functional impairments unrelated to an acute episode of illness.

The S/HMOs' chronic care benefit package has the following features:

- + Like any other additional benefit provided by a Medicare HMO or CMP, the S/HMOs' ability to finance chronic care benefits depends on controlling and/or reducing acute care expenditures, in particular, acute care hospital use and costs, and charging enrollees premiums.
- + The amount of chronic care services that an eligible functionally impaired enrollee may receive is capped by dollar limits. These benefit ceilings are: Medicare Plus II, \$12,000 per year, allocated at a maximum of \$1,000 per month for community care or 100 days of nursing home care per spell of illness; SHP, \$7,500 annually; Elderplan, \$6,500 annually; Seniors Plus, \$6,500 lifetime for nursing home care and a \$5,000 annual community-based benefit.

Through periodic health and functional status assessments, the S/HMOs control eligibility for chronic care services. This eligibility determination process is an attempt to target long term care benefits to those S/HMO enrollees at greatest risk of institutionalization as defined by State Medicaid agencies.

- + The S/HMO chronic care services package integrates institutional nursing home care and non-institutional, community based services including homemaker, personal health aide, medical transportation, adult day health care, respite care, and case management. Decisions on how to appropriately allocate home and community-based and institutional chronic care services are controlled by S/HMO case managers.

In contrast to S/HMOs, TEFRA HMOs and CMPs make no attempt to integrate Medicare and Medicaid services into a single benefit package.

In general, in the design of innovative capitation initiatives, State Medicaid programs have concentrated on approaches to enrolling Aid to Families with Dependent Children (AFDC) recipients in managed care arrangements. States have given minimal attention to developing innovative approaches to enroll the approximately 8 percent of noninstitutionalized Medicare beneficiaries who are also eligible for Medicaid in prepaid health plans. Few TEFRA risk-contracts have substantial aged Medicaid eligible enrollees, and as noted above, these plans do not offer chronic care services or contract with State Medicaid programs to offer home and community-based or institutional long-term care services. The S/HMOs provide dually eligible persons a single delivery system for both acute and long-term care services.

o Enrollment Selection:

TEFRA HMOs and CMPs are not permitted to screen the health status of applicants prior to enrollment. The S/HMO model tested in the demonstration uses a form of functional status screening, referred to in this report as "queuing."

HMOs and CMPs contracting with the Medicare program must enroll Medicare beneficiaries on a first-come, first-served basis without regard to health status, except in the case of persons with end-stage renal disease, to minimize favorable selection of healthier Medicare beneficiaries. TEFRA rate-setting provisions assume that risk-based contractors have enrolled a representative cross-section of the elderly population. In particular, functionally impaired Medicare beneficiaries.

By contrast, S/HMO demonstration site protocols allowed the sites to screen applicants to assure that the demonstrations enroll a representative community sample of functionally impaired persons. This queuing mechanism (discussed in detail below) should, in theory, protect both the S/HMO and the Government from adverse selection, since both shared the risk for financial losses during the first two years of the demonstration.

o Enrollment Limits:

TEFRA HMOs and CMPs cannot have more than 50 percent of their members be Medicare and/or Medicaid eligible and cannot have less than 5,000 members if located in an urban area.

The principal reason Congress instituted the "50:50" rule was to assure Medicare and/or Medicaid enrollees access to care of the same standard as that provided non-Medicare or Medicaid members.

To permit testing sponsorship of a S/HMO by organizations that exclusively serve seniors, HCFA waived the "50:50" rule for Elderplan and SHP. Elderplan and SHP enroll no persons under 65 years of age and after 30 months of operation have yet to achieve enrollments of 5,000 beneficiaries.

The "50:50" rule, unless amended by Congress, would severely limit the development of prepaid health plans, like Elderplan and SHP, specializing in geriatric medicine.

o Ratesetting:

TEFRA HMOs and CMPs receive a monthly payment of 95 percent of the AAPCC for each Medicare enrollee from HCFA. The S/HMOs receive 100 percent of a modified AAPCC for each enrollee.

HCFA payments to S/HMOs differ from payments to TEFRA HMOs and CMPs in that S/HMOs' AAPCC payments are modified as follows:

- + S/HMO members receive a functional status assessment upon joining. If the plans find a person living in the community "at risk" of institutionalization as measured by State pre-admission screening protocols, they receive an institutional rate of payment from HCFA. Such persons are discussed later in this report and are referred to as "nursing home certifiable" or NHC.

- + In comparison to standard AAPCC ratebooks used to pay TEFRA HMOs and CMPs, payment levels for noninstitutionalized, Medicare-only and noninstitutionalized welfare (i.e., Medicaid eligible) enrollees were modified, generally resulting in reduced payment levels for these persons.

This downward adjustment compensates for an assumed less expensive case-mix among nonimpaired, community-based S/HMO enrollees compared to noninstitutionalized beneficiaries paid for under the standard AAPCC formula.

- + 100 percent of all rate cell amounts, rather than 95 percent of AAPCC, is paid by HCFA to the S/HMOs.

In considering the merits of Medicare payment methods to the S/HMOs, it is important to recognize that HCFA's decision to pay the S/HMOs 100% of a modified AAPCC, rather than 95% of the standard AAPCC -- not to treat the S/HMOs like a TEFRA HMO or CMP in terms of capitated payments -- was based only partially on actuarial considerations of what S/HMO enrollees would have cost the Medicare or Medicaid programs had they remained in fee-for-service.

Two other objectives for modifying the standard Medicare AAPCC ratesetting approach in the S/HMO demonstration were:

- + To encourage site participation because of perceived uncertainty about adverse selection concerning the true costs of providing standard Part A and Part B Medicare benefits to nursing home certifiable persons in the community.
- + To limit beneficiary premiums to \$25-40 and co-insurance on chronic care benefits to 10-20 percent.

The issue of selection bias in the S/HMO demonstration has yet to be rigorously addressed. Does the modified S/HMO AAPCC payment formula accurately predict what Medicare reimbursements would have been for S/HMO enrollees had they remained in fee-for-service, or alternatively, had these persons enrolled in TEFRA risk-contracts for which HCFA payments would have been 95 percent of the standard AAPCC formula?

We do not yet know what the acute care costs of NHC S/HMO enrollees would have been in the absence of the demonstration or whether these persons would have been institutionalized or would have continued to live in the community. Also we do not know how different their Part A and Part B Medicare utilization would be compared to non-institutionalized fee-for-service beneficiaries or TEFRA HMO enrollees after adjusting for age, sex, and functional status. This information will be part of the evaluation's final report.

o Risk Sharing:

TEFRA HMOs and CMPs are at full financial risk for all costs incurred. In the S/HMO demonstration, HCFA and State Medicaid programs agreed to share financial risk with the sites, in essence, underwriting an innovative venture.

TEFRA HMOs and CMPs are at full financial risk for the services they provide. The Federal Government does not share risk with these contractors should they not be able to control enrollees' health care use within projected levels or if they incur excessive administrative expenses. In the S/HMO demonstration, HCFA agreed to share risk with the demonstrations. Table 1 describes the dimensions of these risk-sharing arrangements.

ii. To what extent have the S/HMOs been successful in consolidating acute care health and chronic care services?

The S/HMO demonstration tests two organizational models: (1) developing the capacity to provide chronic care services in association with mature HMOs (Medicare Plus II and Seniors Plus); and (2) transforming long-term care providers into prepaid acute care health plans that provide chronic care services benefits (Elderplan and SHP). As a point of reference, not a policy recommendation, "mature HMOs" are defined as TEFRA risk-contractors with 5000 or more Medicare enrollees. As of November 1, 1987, 29 percent (46) of the 159 TEFRA risk-contractors met this criterion. "Long-term provider" refers to suppliers of comprehensive chronic care services, including multi-level residential services and non-institutional community-based services (e.g., adult day care, respite services, homemaker-home health care). Figures 1-4 show the S/HMO demonstration site delivery systems and methods of payments to providers.

Table 1

RISK SHARING ARRANGEMENTS FOR YEARS 1 AND 2 BY S/HMO SITE

Site	Elderplan[a]		Medicare Plus II[b]		SCAN Health Plan (SHP)[c]		Seniors Plus[d]	
	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2	Year 1	Year 2
	\$150,000	\$500,000	4/22 of chronic care losses	Full risk	\$200,000	\$225,000	Total costs up to \$250,000	Total costs up to \$500,000
HCFA	53.1% up to \$520,833; 80.2% thereafter	53.1% up to \$1,736,111; 80.2% thereafter	18/22 of chronic care losses	0	paid all losses beyond \$200,000	paid all losses beyond \$225,000	shared losses proportionate to total costs	shared losses proportionate to total costs
State Medicaid	18.1% up to \$520,833 in losses; 19.8% thereafter	18.1% up to \$1,736,111 in losses; 19.8% thereafter	0	0	[c]	[c]	shared total costs	shared total costs

Source: S/HMO program HCFA contracts. The first project year was 18 months (January 1985-August 1986) and the second project year was 12 months (August 1986-August 1987).

- [a] The first corridor Medicaid loss was \$94,270 and the second corridor Medicaid loss was \$259,710 with an estimated loss of \$300,000 in the last six months for a total of \$653,980. Medicare paid 53.1% of the first \$520,833 in losses and Medicaid paid 18.1%. In the second corridor of losses, Medicare paid 80.2% and Medicaid paid 19.8%.
- [b] HCFA agreed to be fully at risk for the first year (18 months) and Kaiser agreed to be fully at risk for 4 months out of the 22-month first year. The HCFA risk was only for the long term care services.
- [c] SCAN paid for all losses up to \$225,000 in 1985 and 1986. Beyond that level, Medicare paid all losses. Medicaid paid for losses beyond \$15,000 for any individual Medicaid member during Year 1 but had no risk sharing during Year 2.
- [d] Each S/HMO partner was liable for one-half of the financial risk for the site for each year. Each group was liable for its proportion of the costs to the total program budget for the first risk corridor (\$1,059,322). Beyond that level, HCFA and the state shared all losses proportionate to their share of total revenues.

Figure 1

Kaiser Medicare Plus II Service Delivery System and Method of Payment — 1987

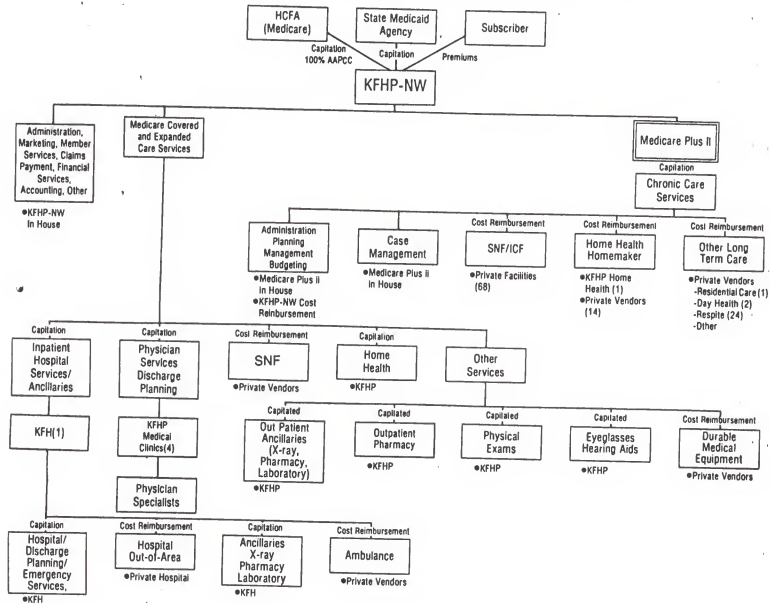


Figure 2
Seniors Plus Service Delivery System and Method of Payment — 1987

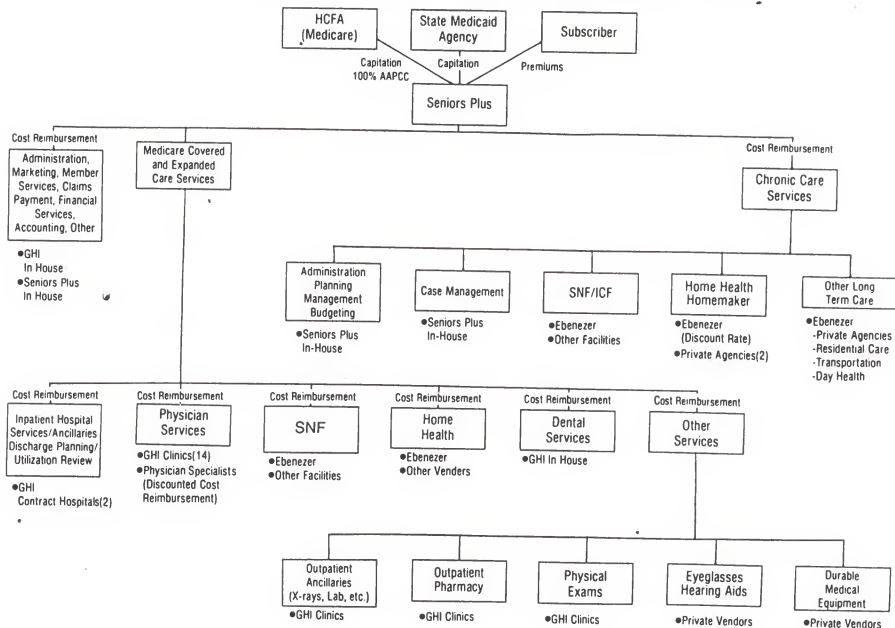


Figure 3
SCAN Health Plan Service Delivery System and Method of
Payment for Services — 1987

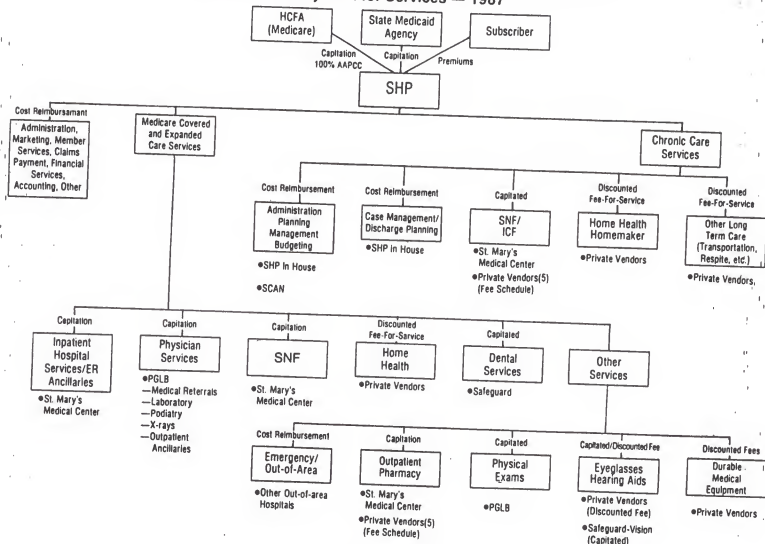
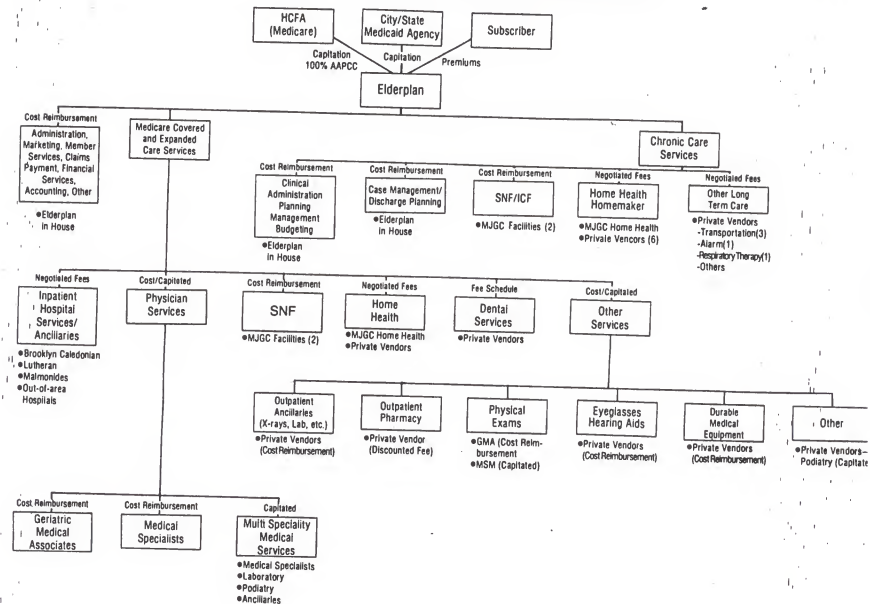


Figure 4
Elderplan Service Delivery System and Method of Payment for Services 1987



All four demonstration sites have been able to integrate delivery of chronic care services to Medicare beneficiaries within a prepaid health care environment. However, the evidence to date indicates that from an organizing and management perspective, developing the S/HMO concept in association with a mature HMO is less expensive and not as complicated as having long term care providers first develop the acute care services infrastructure necessary to support provision of S/HMO chronic care benefits. However, results of the yet to be completed cost-effectiveness analysis may modify this conclusion.

- o For mature HMOs, the key organizing question is how to integrate the S/HMO concept with existing Medicare product lines, both in terms of marketing strategies and service delivery. In both HMO sites, the S/HMO project was treated as a new product line. In so doing, these S/HMOs could make efficient use of the sponsor HMOs' personnel and administrative resources, including hospital and SNF utilization review and discharge planning staff, without recreating these functions.

For acute health care services, S/HMO enrollees received services in the same manner as any other HMO enrollee. Medicare Plus II as developed by KP represents an additional service which augments an existing TEFRA Medicare risk-contract benefits package available in Medicare Plus I. Only those chronic care services unique to the S/HMO concept were the fiscal responsibility of and administered by the Kaiser demonstration project. All other services were fully integrated into the regular Kaiser delivery system.

With very few difficulties in providing for the acute care needs of enrollees, Medicare Plus II and Seniors Plus focused on case-managing functionally impaired enrollees and accessing chronic care services for this sub-group of S/HMO members. Medicare Plus II and Seniors Plus had little difficulty negotiating contractual arrangements with providers of institutional or community-based long term care services. Seniors Plus used Ebenezer Society's well established long term care services network for most of its services, while Medicare Plus II went outside KP for most of its chronic care services.

- o By contrast, a key point for long term care organizations interested in developing the S/HMO concept is to fully understand the considerable staff and financial resources and prepaid acute health care managerial expertise that is necessary for successful S/HMO start-up. Provider-related problems at these two plans were primarily associated with establishing the acute care component of the S/HMO and had much less to do with implementing the chronic care services component of the S/HMO model.

Based on Elderplan's and SHP's developmental period, a long term care provider considering initiating a S/HMO-type venture should anticipate the need for external assistance to share financial risks and management challenges in such an organizational innovation. In addition to considering S/HMO financial requirements, governing bodies and managers of long term care organizations contemplating developing a S/HMO must first gain familiarity with the financial, delivery system, and marketing issues related to operating a prepaid, acute health care delivery system.

Elderplan and SHP devoted considerable resources to first establish themselves as acute care-oriented prepaid health plans. Without any experience in managing physician and hospital relationships under prepaid financing arrangements, these S/HMOs negotiated complex provider agreements associated with numerous complicated management decisions.

Provider relations at SHP and Elderplan were in marked contrast to the established KP and Group Health, Inc., delivery systems. These established HMOs could absorb S/HMO enrollees with few dramatic impacts on policies and procedures for providing services or the need to negotiate special financial arrangements with providers. At SHP and Elderplan, new acute hospital and ambulatory care services had to be established to provide basic HMO services.

- o Even without the problems associated with starting a prepaid health plan, mature HMOs may encounter organizational problems in implementing the S/HMO concept, particularly in marketing.

For example, during the first 30 months of the project, Group Health, Inc., was under increasing pressure from its Twin Cities' HMO competitors. The organization can fairly be described as in a transition period, developing strategies on how to remain competitive in a mature, competitive marketplace. By the time Seniors Plus became operational, Group Health, Inc., was already offering Medicare beneficiaries a TEFRA risk-contract, "Seniors." Thus, in offering the S/HMO, it marketed a new product not only in competition with other Twin Cities' TEFRA risk-contractors but against itself. This situation led to an internal competition between the Seniors Plus S/HMO and the Seniors TEFRA risk-contract product lines for scarce organizational resources.

In summary, the experience of the four S/HMO projects to date indicates that the easiest to implement test of the S/HMO concept would occur in association with financially viable, mature HMOs or CMPs that have demonstrated a commitment to serve the Medicare population through sustained growth of Medicare enrollees. A financially viable prepaid health plan appears to be a necessary condition for implementing the S/HMO concept. Testing the chronic care services component of the S/HMO concept in an established prepaid health care plan minimizes the need to differentiate the negative impacts of start-up related problems associated with new prepaid health plans from program impacts directly related to the unique organizing and financing characteristics of a S/HMO.

III. What has been the impact of S/HMO organization and management on financial performance?

A review of data available for the first 24 months of the demonstration drawn from unaudited S/HMO quarterly reports reveals the relationship between S/HMO organizational characteristics described above and output measures of performance (i.e., utilization and expenditures). Four general findings emerge from this review:

- o All the S/HMO demonstration sites lost substantial amounts of money during their first 24 months of operation. Seniors Plus experienced losses of over \$1.5 million during its first two years of operations. Elderplan experienced the greatest losses, \$2 million in 1985 and \$3.4 million in 1986. SHP losses were slightly greater than \$1.5 million in 1985 and \$1.2 million in 1986. KP's Medicare Plus II experienced a net gain during 1985 and 1986 of \$654,840 for its chronic care and expanded care services, but showed an overall loss of \$854,182 resulting from an estimated \$1.4 million loss on its Medicare covered services.
- o All S/HMOs experienced hospital use rates at or below projected levels and comparable to rates experienced by their TEFRa Medicare risk-contract competition. Hospital expenses represented 23-43 percent of total S/HMO expenditures in 1986. Table 2 shows the hospital utilization for the S/HMOs in 1985 and 1986.
- o Expenditures for S/HMO chronic care benefits are a function of a complex interaction between the demonstration's managing acute care utilization, applying assessment criteria for determining which enrollees are functionally impaired and eligible to receive chronic care benefits, negotiating payment rates for institutional and in-home chronic care services, and allocating chronic care benefits capped by a dollar limit, balancing the use of informal caregivers with formal services.

Chronic care utilization rates and patterns of care varied substantially across sites (e.g., lower use of home health services and higher use of nursing home services at SHP than the other sites). Chronic care services were 7-10 percent of the total S/HMO expenditures at all the sites (except KP). Expenditures for chronic care (including SNF/ICF, in-home chronic care, homemaker, personal care, and long-term care services not covered by Medicare) were similar across sites in 1986: Elderplan, \$32 per member per month (pmpm); SHP and Seniors Plus, \$30 pmpm; and KP, \$21 pmpm.

Table 2

HOSPITAL LENGTH OF STAY AND ADMISSIONS PER 1,000 MEMBERS PER YEAR
AT S/HMO SITES COMPARED TO AVERAGE MEDICARE BENEFICIARY HOSPITAL
LENGTH OF STAY AND ADMISSIONS PER 1000 AGED 65 AND OVER

	Average Length of Stay		Average Medicare Length of Stay	Admission Per 1000 Members/Year		Average Annual Medicare Admissions/ 1000 Aged 65+	Days of Care Per 1000 Members/Year		Average Annual Medicare Admissions/ 1000 Aged 65+
	1985	1986	1984	1985	1986	1984	1985	1986	1984
Elderplan	7.9	10.2	13.7	235	249	267	1860	2533	3667
Medicare Plus II	6.0	5.6	6.7	256	298	478	1538	1675	3185
SCAN Health Plan (SHP)	5.9	6.7	8.0	317	323	334	1883	2178	2685
Seniors Plus	5.1	5.3	7.6	235	227	339	1271	1423	2581

Source: S/HMO Demonstration Projects. Quarterly Reports, 1985, 1986; Unpublished data from S/HMO Demonstrations; Unpublished data from HCFA (25-2-84) Cost Reporting Forms.

[a] Medicare admissions were standardized by the number of aged 65 and over within each geographic area. For Elderplan, Medicare admissions are for Kings County; for Kaiser, they are for Multnomah County; for SCAN, they are for Los Angeles County; for Seniors Plus, they are for Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington Counties.

- o Expenditures for expanded care services (e.g., eyeglasses, prescription drugs) varied substantially across sites: Medicare Plus II and Seniors Plus, \$21 pmpm; SHP, \$34 pmpm; and Elderplan, \$41 pmpm.

Table 3 shows utilization statistics for selected ambulatory care, expanded care (e.g., eyeglasses, prescription drugs), and chronic care services. Table 4 summarizes S/HMO revenues and expenditures for 1985 and 1986.

At Seniors Plus, Elderplan, and SHP poor financial performance primarily relates to high administrative expenditures as a percentage of total plan costs and unanticipated marketing costs associated with slow enrollment, and secondarily, to the terms of the capitated financial arrangements negotiated with hospital and physician providers (i.e., SHP and Elderplan). The HMO literature clearly documents that these factors are associated with the failure of new prepaid health care ventures (Lewin and Associates, 1986).

Under demonstration protocols, plan losses were mitigated by risk-sharing arrangements with HCFA and State Medicaid programs described in Table 1. In the absence of risk-sharing, which covered costs associated with providing acute and chronic care services as well as administrative and marketing expenses, it is probable that at least two of the demonstrations (i.e., Elderplan and SHP) would have ceased operations.

Financial losses associated with start-up and initial operations should not have been unanticipated. Goran (1981) found in a study of 73 HMOs that an average of \$2.1 million was needed before a prepaid health plan could expect to break-even. Staff model HMOs required greater capitalization (i.e., \$3.3 million) than network models (i.e., \$1 million). Taking inflation and increasing competitive marketing pressures into account between 1981 and 1986, S/HMO losses during the first 24 months of the demonstration, particularly in Elderplan and SHP, are consistent with these findings.

The issue, however, is one of opportunity cost for the Federal and State Governments who, in essence supported the developmental costs of two new prepaid health plans. Could this money have been better invested in testing the S/HMO concept where start-up costs could have been minimized?

During the risk-sharing period, S/HMO financial performance had important financial impacts on demonstration site sponsors. The potential impact on sponsors is even greater given that all four demonstration sites are now at full financial risk for the remainder of the demonstration:

Table 4

S/MHO REVENUES, EXPENDITURES, AND NET GAIN OR LOSS FOR 1985 AND 1986 (PHM)

	Kaiserplan		Medicare Plus II [a]		SCAN Health Plan (SNP)		Seniors Plus	
	1985	1986	1985	1986	1985	1986	1985	1986
Total Member Months	5,310	19,640	20,085	47,825	6,704	19,827	2,859	15,719
Revenues								
Member premiums	29.08	28.93	48.62	47.94	39.96	39.23	29.50	25.12
Copayments	10.59	12.42	.66	1.44	-[b]	-[b]	10.12	8.55
Medicare AAPCC	260.67	243.40	201.04	214.36	302.42	324.01	197.37	190.94
Medicaid	349.85	376.98	351.96	349.05(c)	128.19	204.50	255.55	194.78
Total Revenues [d]	307.54	291.58	255.11	273.74	334.45	351.68	237.70	224.84
Provider Expenditures								
Hospital [e]	\$ 82.02	\$107.37	107.25	122.51	\$102.56	\$104.68	\$60.39	\$71.26
Ambulatory Encounters [f]	111.18	88.16	90.43	87.85	72.00	79.10	88.27	71.53
Medicare Nursing Home [g]	8.48	7.11	5.02	5.71	12.16	22.79	6.80	3.16
Medicare Home Health [g]	4.97	4.29	9.66	10.37	2.15	3.35	4.55	3.58
Other Medicare [h]	6.90	5.78	3.13	3.45	3.68	3.24	5.18	4.97
Chronic Care [i]	25.48	32.27	21.04	21.04	32.87	30.09	40.01	29.70
Expanded Care [j]	30.91	40.89	19.61	20.46	30.89	34.19	18.56	21.28
Case Management Staff [k]	23.91	9.92	4.50	4.50	22.20	15.37	39.27	9.17
Administrative Expenditures								
Marketing	114.40	52.99	1.78	1.78	112.55	38.69	65.12	40.19
Administration [l]	198.55	81.51	4.21	8.44	91.28	39.57	70.72	25.01
Capital & Other Costs [m]	69.37	28.50	NA	NA	39.26	20.10	21.99	6.95
Total Expenditures [n]	676.18	458.87	267.23	286.11	521.59	391.17	420.87	286.82
Total Expenditures with Risk Reserves	683.96	464.28	267.23	286.11	550.95	413.44	420.87	286.82
Total Gain or Loss PHM	-376.43	-172.81	-12.12	-12.77	-216.50	-61.76	-183.18	-61.98
Net Gain or Loss [o]	(\$1,998,822)	(\$3,393,952)	(\$243,430)	(\$610,752)	(\$1,451,432)	(\$1,224,479)	(\$523,701)	(\$974,218)

Source: S/MHO Demonstration Projects. Quarterly Reports, 1985, 1986. These are unaudited data, and subject to final adjustments.

[a] Kaiser reported total expenditures only for its chronic care and expanded care services and administration. Expenditures for acute care, ambulatory care, and Medicare benefits were estimated.

[b] SNP charged copayments, but these were collected by providers and not reported to SNP.

[c] The Oregon State Medicaid program excluded long term care eligible clients at initial enrollment from the project.

[d] Total revenues included other revenues from interest and other sources.

[e] Hospital expenditures include in-area emergency and out-of-area services. For Seniors Plus and Medicare Plus II, outside referrals were included in this figure.

[f] Includes medical referrals and ambulatory encounters. For Seniors Plus, referrals were not included with ambulatory encounter expenditures. SNP physicians received an additional \$2 ppm in 1985 from the risk reserves not shown in the above figures.

[g] Includes Medicare only.

[h] Durable medical equipment.

[i] Includes non-Medicare SNF/ICF, non-Medicare home-health, in-home services, and day care services. For Medicare Plus II, the average audited costs are shown for both years.

[j] Includes dental, prescription drugs, vision, hearing aids, medical transportation, and emergency medical response system.

[k] For Medicare Plus II, the average audited costs are shown for both years. [l] Includes all administrative costs including salaries and benefits.

[m] Includes interest, depreciation, amortized start-up and rent for administrative and staff offices.

[n] Excludes risk reserves.

[o] For Medicare Plus II, the total amount of savings from the chronic care component was \$654,840 for 1985 and 1986. Actual AAPCC revenue for Medicare covered benefits was \$1.4 million lower than ACR projected expenditures in 1985 and 1986. Thus, KP showed an overall loss of \$854,182 for 1985 and 1986.

- o Although the S/HMO was only a small project within the Kaiser Foundation Health Plan delivery system, its \$13 million in 1986 revenues represented 4.6 percent of total KP - Northwest revenue in 1986.
- o While Seniors Plus is only one of 10 products offered by Group Health, Inc., and represents less than 1 percent of its total membership, the financial difficulties experienced during the first 24 months of the S/HMO demonstration caused sponsor managers to view S/HMO losses with concern. While Group Health, Inc., and Ebenezer agreed to continue the S/HMO demonstration at full financial risk, they reduced marketing efforts, and continued to carefully monitor acute and chronic care services use.
- o As a subsidiary, Elderplan's revenues of \$6.6 million represented 12 percent of total Metropolitan Jewish Geriatric Center (MJGC) revenue in 1986. Overall, MJGC experienced a net loss of \$2.8 million in 1986 unrelated to its involvement in the S/HMO demonstration.

Coupled with its own financial difficulties which necessitated private fund raising efforts, Elderplan's losses have caused MJGC to reevaluate the future of the demonstration. In this regard, MJGC has initiated strategic planning activities. These activities have focused on actively searching for a financially stable partner or buyer for Elderplan in the prepaid health plan and insurance communities.

- o SHP losses were significantly higher than the sponsor, SCAN anticipated. With 1986 revenues of \$8 million and net losses of \$1.2 million in 1986, SHP became considerably larger than its parent, SCAN (i.e., \$1.9 million in 1986 revenue). Had SHP been at full financial risk, these losses would have threatened SCAN's survival. In February 1987, SHP's hospital provider, St. Mary Medical Center (SMMC) agreed to defer the payments of a \$1 million loan to SHP. In addition, SMMC stated it was willing to assume financial risk for the demonstration after risk-sharing with HCFA ended, on the condition that substantial changes be made in S/HMO benefits and plan operations.

- IV. Have the S/HMOs been able to enroll a broad cross-section of the elderly population, including Medicare beneficiaries eligible for Medicaid and persons "at risk" of institutionalization? How did product design, competitive market forces, and marketing practices affect S/HMO enrollments?

Each demonstration faced the challenge of marketing the S/HMO concept in different and rapidly changing health care environments; from the mature competitive Twin Cities and Long Beach, to the emerging competitive Portland, Oregon, and newly competitive New York City markets. In planning the demonstration in 1983 and 1984, all sites assumed they would have little difficulty in convincing Medicare beneficiaries to join their plans in sufficient numbers to meet projected break-even enrollment levels of 4,000 members within 18 months of operations. The following analyses focus on understanding the factors influencing the enrollment experience of each S/HMO within the context of its specific market. Much less emphasis is placed on comparing S/HMO enrollment patterns and beneficiary characteristics across sites.

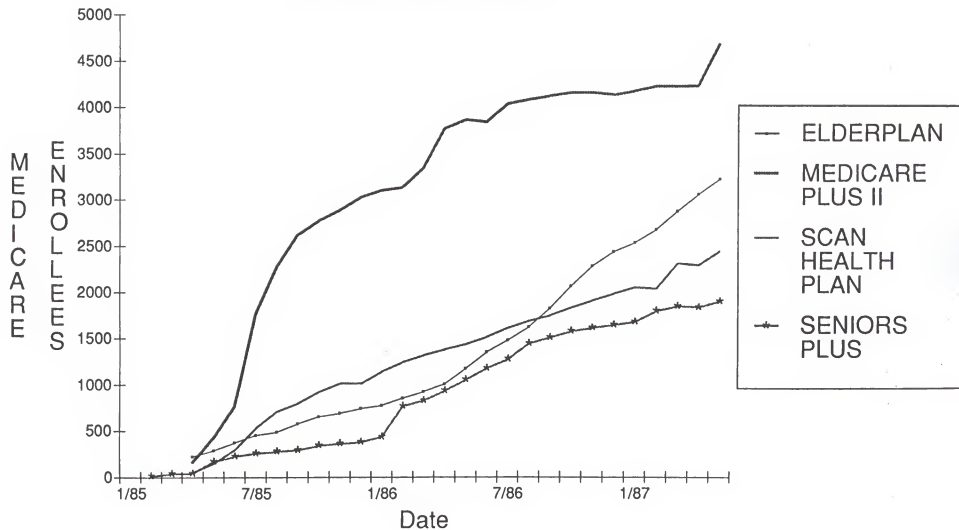
Only Kaiser's Medicare Plus II met the demonstration protocol enrollment target. Approximately half of Medicare Plus II's membership were already associated with the Kaiser system, converting from cost contract membership. The long standing reputation and experience of the Kaiser Foundation Health Plan in marketing to and serving Medicare beneficiaries aided its enrollment efforts. Figures 5-8 compares S/HMO enrollment among the sites and for the three markets where the S/HMOs had TEFRA competition, S/HMO enrollments are compared to their competition.

These graphs, covering the period January 1, 1985, the inception of the demonstration, through April 1987, clearly illustrate which plans are market leaders in enrolling Medicare beneficiaries. As such, they represent the S/HMOs' principal TEFRA HMO competitors. Moreover, these statistics indicate that an argument of market saturation as an explanation for slow S/HMO enrollments in the mature competitive Twin Cities and Long Beach markets cannot be supported.

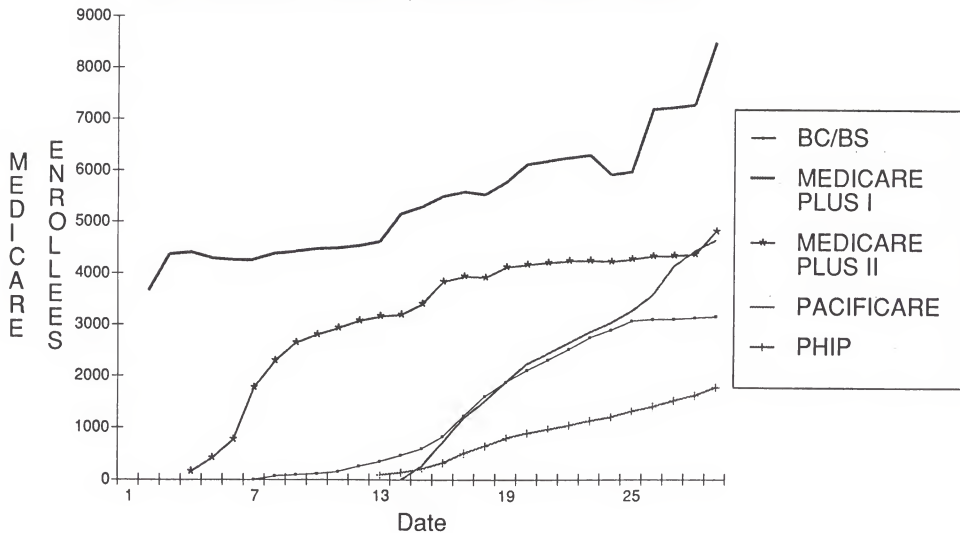
The adverse effects of market competition on S/HMO enrollment in the Twin Cities and Long Beach were compounded by formative decisions at SHP and Seniors Plus that may have negatively influenced S/HMO marketability. These factors, which were also present at Elderplan, interacted in a complex fashion and included:

- o Pricing the S/HMO benefit package. In the three markets where TEFRA competitors existed, the S/HMO product may not have been price competitive. Competing TEFRA HMO premiums ranged from \$0 to \$29 a month for basic coverage, and from \$20 to \$30 for high option coverage. Depending on the plan, low option or high option coverage may include benefits not covered by the Medicare program (e.g., prescription drugs, eyeglasses, routine dental care). By contrast, S/HMO premiums ranged from \$25 to \$49.
- o Selecting hospital and physician providers whose attributes, when compared to market leader HMOs or fee-for-service, may have been viewed less favorably by Medicare beneficiaries (e.g., access to physicians at Seniors Plus and hospital access at SHP) or who did not fully support the S/HMO (i.e., physicians affiliated with SHP).
- o Limiting the number of ambulatory care delivery sites, which not only restricted physician access for potential enrollees but limited the use of physicians in marketing the plan. This was particularly the case at Elderplan.
- o Limiting the geographical area in which the S/HMO was offered to sub-areas of the market (e.g., Long Beach, rather than all of Los Angeles County) thus placing the S/HMOs at a disadvantage with respect to their TEFRA competition in effective use of media advertising and in negotiating with group purchasers such as corporations or unions that provided retiree health benefits.
- o Meeting the challenge of promoting the S/HMO concept as something different than another TEFRA HMO alternative. The demonstrations, particularly Seniors Plus and SHP, tried to advance the chronic care services component of the S/HMO benefit package but found it difficult to develop a promotional strategy that positioned and differentiated the S/HMO concept from coverage already offered by high option TEFRA HMO alternatives.
- o Underestimating necessary marketing budgets in the initial project year. As actual enrollments began to lag behind projected membership, resources devoted to marketing increased. At Seniors Plus, SHP, and Elderplan marketing budgets ranged from 10-14 percent of total operating costs but were still less than the amount of resources generally devoted to marketing by TEFRA HMO competitors.

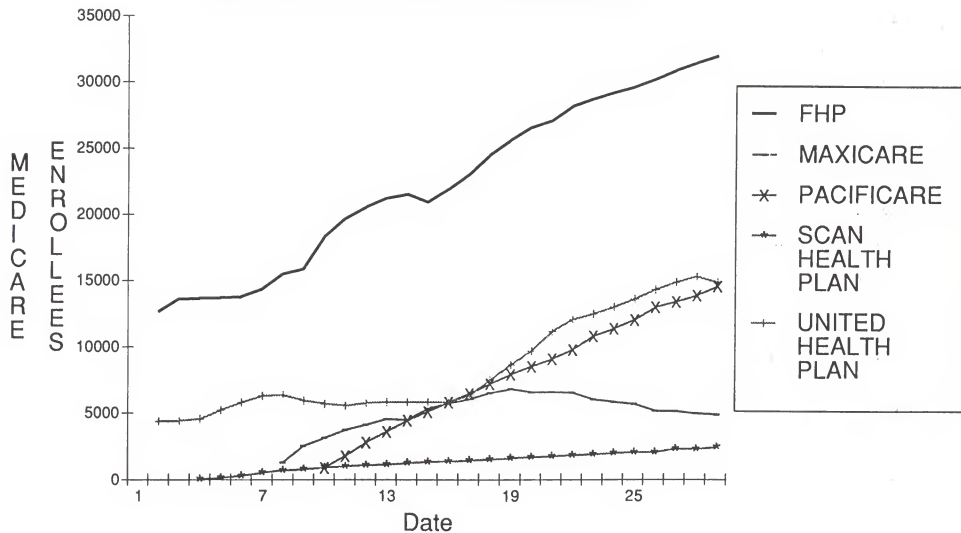
S/HMO ENROLLMENT



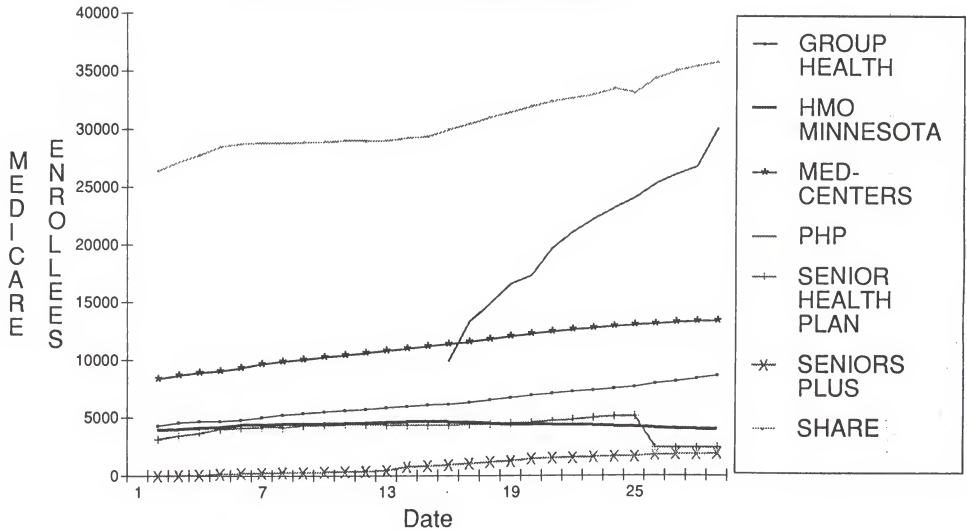
MULTNOMAH COUNTY, OREGON ENROLLMENT



LOS ANGELES COUNTY ENROLLMENT



TWIN CITIES TEFRA ENROLLMENT



An additional factor negatively influencing enrollment success, particularly in the highly competitive Minneapolis-St. Paul and Long Beach markets, was delayed entry. The initial planning and marketing activities for the S/HMO occurred in 1983. As the S/HMOs prepared to start-up, there was a one year delay in Federal approval which was not resolved by Congress until summer 1984. The S/HMOs then submitted their final protocols to HCFA and were approved for start-up in early 1985.

Except for Medicare Plus II, only Elderplan has begun to achieve a level of monthly growth consistent with enrollment projections at the outset of the demonstration. As of September 1987, enrollments are 4952 at Medicare Plus II; 4068 at Elderplan; 2705 at SHP; and 2417 at Seniors Plus.

None of the sites achieved planned Medicaid enrollments, projected by the sites at 500 Medicare Plus II; 517 Elderplan; 800 SHP; and 650 Seniors Plus. At the end of 24 months, the number of dually eligible enrollees at each of the sites was 108 at Medicare Plus II; 106 at Elderplan; 221 at SHP; and 22 at Seniors Plus.

A major issue in marketing the S/HMO was, and remains, uncertainty about selection bias. Because the proportion of potential chronic care benefit users was projected to be small (i.e., between 5 and 14 percent), the S/HMOs argued to HCFA that minor variations from these projections could place the sites in financial jeopardy and strain service delivery systems.

To protect against adverse selection (i.e., the S/HMOs enrolling a larger percentage of functionally impaired members than in the aged population in the market area), HCFA permitted the sites to exercise the option of queuing applicants. The purpose of queuing was to assist the S/HMO in achieving and maintaining an enrollee case-mix whose distribution on levels of functional impairment (i.e., severely, moderately, and unimpaired) was representative of the distribution estimated for the community. Based on data from national surveys of the elderly (e.g., 1977 Current Medicare Survey; 1977 Health Interview Survey), Brandeis University researchers estimated that 3-6 percent of the population would be severely impaired, 13-17 percent moderately impaired, and 72-82 percent unimpaired.

Medicare Plus II decided from the outset not to queue applicants. At the other three sites, the S/HMO Application Form contained a set of questions about the applicant's functional status. All applications were reviewed by the S/HMOs' membership services department, and when the proportion of S/HMO enrollees in either the severely or moderately impaired categories exceeded community estimates, the sites could place the applicant on a waiting list until more unimpaired persons enrolled.

Elderplan made the greatest use of queuing. At the end of the fourth quarter 1985, Elderplan had 29 severely impaired and 6 moderately impaired applicants on its waiting list. In the fourth quarter 1986, 123 severely impaired persons were in the Elderplan queue. At the end of the fourth quarter 1985, Seniors Plus' queue had 14 severely impaired persons. By the end of the fourth quarter 1986, Seniors Plus' severely impaired queue had grown to 87 persons. SHP had no persons in its queue at the end of 1985 or 1986 but did intermittently queue applicants.

The following observations can be made about whether the S/HMOs enrolled a broad cross-section of the elderly population: (1)

- o In Portland, Long Beach, and the Twin Cities, there were no statistically significant differences between the percentage of severely impaired Medicare beneficiaries enrolled in the S/HMO and the estimated percentage of severely impaired Medicare beneficiaries who enrolled in risk-contract HMO competitors from June 1985-March 1986, the initial year of the S/HMO demonstration or in fee-for-service. Severe impairment is defined as the presence of one or more limitations in activities of daily living and/or being bed bound. In the Twin Cities, the percentage of severely impaired S/HMO enrollees was somewhat less than the estimate for fee-for-service beneficiaries and slightly more than among

1 These findings are based on a telephone survey conducted by Westat, Inc. May 1986-January 1987. This survey collected health status and demographic data from a random sample of 9518 aged fee-for-service Medicare beneficiaries residing in the S/HMO market areas and 2132 beneficiaries who joined TEFRA HMO risk-contract competitors to the S/HMOs from June 1985-March 1986. The primary purpose of this survey was case-finding; to identify functionally impaired fee-for-service Medicare beneficiaries who could serve as the evaluation's comparison group. These data are compared to equivalent data on the population of S/HMO enrollees collected by the S/HMOs primarily through mail surveys joining Medicare Plus II and SHP from the beginning of the demonstration through June 1986 and at Elderplan and Seniors Plus through December 1986. In total, 9884 persons comprise this S/HMO population.

HMO enrollees.

In Brooklyn, the percentage of severely impaired S/HMO enrollees was considerably less than in fee-for-service. No HMO comparison group was available in Brooklyn as there were no Medicare risk-contract HMOs or CMPs marketed during the study period:

	<u>S/HMO(%)</u>	<u>HMO(%)</u>	<u>FFS(%)</u>
+	Portland	5.3	5.4
+	Long Beach	6.0	6.1
+	Twin Cities	5.3	4.0 [b]
+	Brooklyn	2.9 [a]	-
			8.9

[a] $p < .05$ for difference between S/HMO and FFS proportions

[b] $p < .05$ for difference between HMO and FFS proportions

- o With the exception of Elderplan, the S/HMOs have enrolled a greater percentage of moderately impaired persons than either their TEFRRA HMO competition or among fee-for-service Medicare beneficiaries:

	<u>S/HMO(%)</u>	<u>HMO(%)</u>	<u>FFS(%)</u>
+	Portland:	14.8 [a]	4.2 [c]
+	Long Beach:	13.4 [a]	8.0 [c]
+	Twin Cities:	10.4 [c]	5.6 [b]
+	Brooklyn:	7.5 [a]	-
			10.3

[a] $p < .05$ for difference between S/HMO and FFS proportions

[b] $p < .05$ for difference between HMO and FFS proportions

[c] $p < .05$ for difference between S/HMO and HMO proportions

Moderate impairment is defined as the presence of two or more limitations in instrumental activities of daily living, the use of a wheelchair or walker, proxy report of severe memory loss, and/or S/HMO site-specific defined impairment. It is important to observe that up until June 1986, Elderplan had enrolled a percentage of moderately impaired persons comparable to the fee-for-service estimate provided

here. An as yet unexplained decline in enrolling impaired persons seems to have occurred at Elderplan between July-December 1986.

- o Generally, the percentage of S/HMO enrollees who report themselves in the extremes of excellent or poor health is consistently less than in fee-for-service and HMO samples:

+ Percent in excellent health:

	<u>S/HMO(%)</u>	<u>HMO(%)</u>	<u>FFS(%)</u>
Portland:	23.5 [a]	41.9 [c]	36.0 [b]
Long Beach:	24.1 [a]	35.1 [c]	37.1
Twin Cities:	16.5 [a]	37.1 [c]	31.9 [b]
Brooklyn:	20.6	-	21.0

+ Percent in poor health:

Portland:	1.5 [a]	3.2 [c]	5.0 [b]
Long Beach:	2.9 [a]	5.4 [c]	6.2
Twin Cities:	1.1 [a]	3.1 [c]	5.4 [b]
Brooklyn:	2.4 [a]	-	10.0

[a] $p < .05$ for difference between S/HMO and FFS proportions

[b] $p < .05$ for difference between HMO and FFS proportions

[c] $p < .05$ for difference between S/HMO and HMO proportions

- o Generally, the percentage of S/HMO enrollees reporting having a usual source of care prior to enrolling is less than that reported by both TEFRA HMO enrollees prior to their enrollment and fee-for-service Medicare beneficiaries:

	<u>S/HMO(%)</u>	<u>HMO(%)</u>	<u>FFS(%)</u>
+	Portland: 84.7 [a]	97.4 [c]	92.0 [b]
+	Long Beach: 84.5 [a]	92.0 [c]	91.4
+	Twin Cities: 89.5 [a]	97.1 [c]	92.9 [b]
+	Brooklyn: 69.0 [a]	-	90.0

[a] $p < .05$ for difference between S/HMO and FFS proportions

[b] $p < .05$ for difference between HMO and FFS proportions

[c] $p < .05$ for difference between S/HMO and HMO proportions

The dramatic difference in Brooklyn indicates that because Elderplan enrollees had limited primary care physician access (i.e., only one small physician group) in order to join this S/HMO, they would almost certainly have to give up their usual source of care, if they had one. Second, not having a usual source of care is associated with being in better health and thus having a weaker bond with medical services.

- o Reflected in these data are certain market-specific demographic differences between S/HMO enrollees, TEFRA HMO enrollees, and Medicare fee-for-service beneficiaries that may be useful from the perspective of marketing research:(2)

- + Medicare Plus II (i.e., Portland) enrollees tended to be older, less well educated and have lower incomes than either TEFRA HMO or fee-for-service Medicare beneficiaries. For example, 45 percent of Medicare Plus II enrollees had not graduated from high school, compared to 24 percent of HMO enrollees, and 28 percent of fee-for-service beneficiaries. Only 8 percent of Medicare Plus II enrollees had incomes of \$25,000 or more, compared to 17 percent of HMO enrollees, and 17 percent of fee-for-service respondents.

2 All differences between S/HMO enrollees, recent TEFRA enrollees, and fee-for-service Medicare beneficiaries are statistically significant, $p < .05$.

- + A greater percentage of SHP (i.e., Long Beach) enrollees lived alone (43 percent) than among HMO (35 percent) or fee-for-service (34 percent) beneficiaries. While 50 percent of S/HMO enrollees were 75 or older, only 38 percent of fee-for-service beneficiaries and 33 percent of HMO enrollees were older than 75. Hispanic Medicare beneficiaries appear to have been disproportionately attracted to SHP's TEFRA HMO competition (i.e., 15.7 percent of TEFRA HMO respondents were Hispanic compared to only 2 percent of S/HMO enrollees and 4 percent of fee-for-service respondents). Both SHP and Long Beach TEFRA enrollees tend to have lower incomes than fee-for-service Medicare beneficiaries. While 45 percent of S/HMO enrollees and 38 percent of HMO enrollees had incomes of less than \$10,000, 23 percent of fee-for-service beneficiaries fell in this income level. S/HMO, HMO, and fee-for-service respondents seem to have similar educational levels.

- + In the Twin Cities, fee-for-service beneficiaries tend to have lower incomes than either Seniors Plus or TEFRA HMO enrollees. Only 24 percent of S/HMO enrollees report incomes under \$10,000 compared to 27 percent of HMO enrollees and 33 percent of fee-for-service beneficiaries. Both S/HMO and TEFRA enrollees are also less likely to live alone and more likely to live with a spouse than are Twin Cities' fee-for-service Medicare beneficiaries. While 34 percent of S/HMO enrollees were over-75, an estimated 51 percent of Twin Cities' fee-for-service beneficiaries were 75 or older.

V. How aware were Medicare beneficiaries of the S/HMO alternative to traditional fee-for-service Medicare and TEFRA risk-based prepaid health plans? How did Medicare beneficiaries become aware of the S/HMO alternative? Why did Medicare beneficiaries choose to join a S/HMO?

With the exception of Elderplan, the other three demonstration sites appear to have enrolled Medicare beneficiaries whose prevalence of functional impairment is consistent with a fundamental principle underlying the S/HMO concept-- enrolling a cross-section of the Medicare population. The percentage of severely and moderately impaired S/HMO enrollees is greater than the estimated distribution of impairment among fee-for-service beneficiaries in Portland, Long Beach, and the Twin Cities. Especially when compared to persons who enrolled in TEFRA HMO competitors, the S/HMOs appear to have enrolled even a greater percentage of moderately impaired persons.

These data are problematic from two perspectives. First, this finding may indicate a favorable selection bias among the S/HMOs' TEFRA competition with respect to enrolling persons whose functional status levels approximate the distribution of functional status in the market area.

Second, these data illustrate the difficulty faced by the S/HMOs in differentiating their product from TEFRA HMO competitors:

- o To the extent that the S/HMOs place undue emphasis on promoting the unique chronic care benefits package, they risk increasing the probability that disproportionate numbers of severely or moderately impaired Medicare beneficiaries will be attracted to the S/HMO (i.e., encourage adverse selection). This could especially be the case if queuing was not allowed or eligibility criteria for chronic care benefits were relaxed.
- o On the other hand, to the extent that the S/HMOs avoid promoting their plan's chronic care benefits, they may fail to differentiate their product from existing Medicare prepaid health plan alternatives (e.g., to the public, a S/HMO looks no different than a TEFRA HMO) and with generally higher premiums fail to meet break-even enrollment levels.

Awareness of Medicare prepaid health plan alternatives is a necessary condition for deciding to choose to join such a plan. Survey findings from the evaluation of 17 Medicare competition demonstrations located throughout the country showed that 53 percent of fee-for-service Medicare beneficiaries who were not enrolled in HMOs but lived in market areas with Medicare HMOs were aware that the HMO option was available to them (Brown, Clemencki, and Langwell, 1987). Prepaid health plans entering the Medicare market must design marketing materials that 1) provide information on the HMO concept, generally; and 2) emphasize the particular advantages of the specific package offered by the HMO.

As measured in the S/HMO evaluation, HMO awareness in the mature competitive Twin Cities and Long Beach markets was much higher than 53 percent. An estimated 78 percent of Twin Cities and 76 percent of Long Beach fee-for-service beneficiaries were cognizant of HMOs.(3)

By contrast, 59 percent of Portland fee-for-service respondents recognized the concept of an HMO, although 72 percent of these persons reported hearing about Kaiser Medicare Plus I, the Portland TEFRA HMO "market leader." In this study, "market leader" is defined as the TEFRA risk-contract HMO with the largest enrollment at the time of the survey. This finding speaks to the dominance of KP in this market and to the relatively recent emergence of prepaid health plan alternatives in Portland serving the Medicare population.

Only an estimated 38 percent of Brooklyn Medicare beneficiaries knew about the HMO concept. This finding reflects the newly competitive nature of the New York City market with respect to the introduction of prepaid health plan alternatives for both Medicare beneficiaries and persons under-65 years of age.

3 These findings on awareness or prepaid health plan alternatives and choice of the S/HMOs are based on telephone interviews with 4188 S/HMO, TEFRA HMO, and fee-for-service Medicare beneficiaries drawn from the larger fee-for-service and TEFRA HMO samples and S/HMO population described in Footnote 1.

In the Twin Cities and Long Beach, S/HMO members, recent TEFRA enrollees, and fee-for-service beneficiaries had approximately the same levels of awareness of the trade name of the TEFRA market leader (i.e., around 75 percent in Long Beach and 89 percent in the Twin Cities). However, in Portland only an estimated 42 percent of S/HMO enrollees could identify Medicare Plus I, while 89 percent of recent Portland TEFRA HMO enrollees could identify Medicare Plus I from a list of risk-contracts marketed in Multnomah County. Respondents were not asked if they were aware of the plan they joined.

On one hand it is difficult to understand this result, as approximately 2,400 S/HMO enrollees were Kaiser cost contract converts and ostensibly should have been aware of the Kaiser TEFRA risk-contract alternative. On the other hand, during the period when Kaiser actively marketed the S/HMO in Multnomah County, it did not promote the Medicare Plus I TEFRA product. Kaiser consciously decided not to market two competing Medicare products until the projected S/HMO enrollment of 4,000 members was met. Thus, it is possible that relatively few Portland fee-for-service Medicare beneficiaries were likely to have heard of Medicare Plus I.

Compared to TEFRA market leaders, awareness of the S/HMO among recent TEFRA enrollees and fee-for-service beneficiaries was lower, considerably so in Long Beach and Portland. In the Twin Cities, awareness of Seniors Plus was high; an estimated 65 percent among persons joining a TEFRA HMO competitor and 70 percent among fee-for-service beneficiaries. In Long Beach, 43 percent of fee-for-service and 47 percent of HMO enrollees acknowledged hearing about SHP. While in Portland, 38 percent of fee-for-service and 55 percent of HMO enrollees recognized Medicare Plus II. Unfortunately, due to an oversight in data collection procedures, we cannot estimate what percentage of Brooklyn fee-for-service Medicare beneficiaries were aware of Elderplan.

Survey data also indicate that across all markets, the sources of information having the greatest influence on Medicare beneficiaries choosing the S/HMO were consistently different than among beneficiaries choosing HMOs:

- o In the Twin Cities, Long Beach, and Portland, word-of-mouth from friends and relatives was overwhelmingly Medicare beneficiaries' most influential source of information in the TEFRA enrollment decision. Among the S/HMOs, 17 percent of Seniors Plus, 24 percent of SHP, 26 percent of Medicare Plus II, and 30 percent of Elderplan enrollees found word-of-mouth to be most influential in their decision to join a S/HMO. By contrast, 70 percent of Twin Cities, 59 percent of Long Beach, and 49 percent of Portland TEFRA HMO enrollees were convinced to join a prepaid health plan by friends and relatives.
- o The predominant way in which S/HMO enrollees report finding out about the demonstration was mass marketing campaigns (i.e., direct mail and telemarketing). 55 percent of Seniors Plus, 45 percent of Medicare Plus II, and 37 percent of Elderplan enrollees cited direct mail, telemarketing, and individual meetings with plan sales representatives as most influential in their enrollment decision. At SHP, in addition to 21 percent of respondents acknowledging these marketing approaches as most influential in their decision to enroll, an additional 18 percent stated that plan advertisements convinced them to enroll.

These findings about Medicare beneficiaries' awareness of the S/HMOs and the sources reported as most influential in the enrollment decision are consistent with how the demonstration sites promoted and sold the S/HMO during the first 24 months of the demonstration.

- o In marketing their demonstrations, Elderplan and Medicare Plus II did not actively promote the chronic care services component of the S/HMO but chose to sell the demonstration as a comprehensive prepaid health plan. Seniors Plus and SHP did initially emphasize the S/HMOs' chronic care benefits in their marketing literature.

These marketing strategies were logical. Awareness of the HMO concept was relatively low among Brooklyn seniors. Since Elderplan faced no TEFRA competition during its first 24 months of operations, marketing resources were better spent informing persons about the general advantages of prepaid health care than promoting the unique features of the S/HMO model. Similarly Medicare Plus II's desire to have the S/HMO product be consistent with KP's corporate objectives argued for treating the S/HMO simply as a another option for seniors that Kaiser was willing to stand squarely behind.

- o By contrast, SHP and Seniors Plus recognized that in their mature competitive markets, the S/HMO concept would somehow have to be clearly differentiated from TEFRA HMO alternatives if it was to sell. Promoting the availability of chronic care services is one way to differentiate the S/HMO from other prepaid Medicare alternatives.

SHP and Seniors Plus faced a greater marketing challenge than the other demonstration sites. In the Twin Cities and Long Beach, the S/HMO demonstration was introduced in mature competitive markets where other HMOs already offered Medicare beneficiaries additional non-covered services (e.g., prescription drugs) at competitive prices. Based upon enrollments to date, it appears that neither SHP nor Seniors Plus has successfully accomplished this positioning objective.

The way in which the demonstrations advanced the chronic care services part of the S/HMO model has made it difficult to explore the fundamental question of consumer interest in long-term care services within the framework of a comprehensive prepaid health plan. The role that may have been played by the chronic care services benefit package in influencing enrollment is only partially revealed in the analysis of data as to why Medicare beneficiaries joined a S/HMO.

The most important reasons given by S/HMO enrollees for joining the four demonstrations are similar across sites and are distinctly different than the principal reason given by Medicare beneficiaries who could have joined the S/HMOs but decided to enroll in a TEFRA HMO competitor instead. At all sites, the opportunity to get more benefits was the dominant reason persons joined the S/HMO demonstrations (64 percent Seniors Plus; 38 percent Medicare Plus II; 35 percent Elderplan and 36 percent Long Beach). By contrast, TEFRA HMO enrollees explicitly related price to coverage considerations as their most frequently occurring reason for enrolling (37 percent Long Beach; 30 percent Portland; and 24 percent Twin Cities). In addition, 15 percent of Portland and 16 percent of Long Beach TEFRA enrollees cited only lower premiums as the major reason they joined a Medicare prepaid health plan alternative.

The evaluation has no direct empirical evidence as to whether Medicare beneficiaries who joined a S/HMO primarily because of additional benefits were especially attracted because of chronic care services availability or because of expanded services not covered by Medicare or available HMO alternatives (e.g., prescription drugs).

Across all four sites, at least 95 percent of S/HMO respondents knew that their demonstrations provided prescription drug benefits. Regarding prescription drug insurance coverage among TEFRA HMO enrollees and fee-for-service beneficiaries, the percentage of respondents stating they had such coverage ranged as follows:

		<u>HMO(%)</u>	<u>FFS(%)</u>
+	Portland	51.1	40.7 [b]
+	Long Beach	78.0	57.0 [b]
+	Twin Cities	28.3	59.1 [b]

[b] $p < .05$ for difference between HMO and FFS proportions

These data indicate that S/HMO enrollees do perceive a superiority in coverage of non-chronic care services not covered by Medicare when compared to available HMO alternatives or fee-for-service.

By comparison, between 85 to 94 percent of S/HMO enrollees knew they had expanded nursing home and home care benefits while among TEFRA HMO and fee-for-service Medicare beneficiaries awareness about chronic care services coverage ranged as follows:

		<u>S/HMO(%)</u>	<u>HMO(%)</u>	<u>FFS(%)</u>
+	Portland	90.6 [a]	61.9 [c]	34.0 [b]
+	Long Beach	93.9 [a]	58.5 [c]	38.4 [b]
+	Twin Cities	91.9 [a]	48.7 [c]	36.1 [b]
+	Brooklyn	84.7 [c]	-	28.8

[a] $p < .05$ for difference between S/HMO and FFS proportions

[b] $p < .05$ for difference between HMO and FFS proportions

[c] $p < .05$ for difference between S/HMO and HMO proportions

The finding that between 49 to 62 percent of TEFRA HMO and 29 to 38 percent of fee-for-service Medicare beneficiaries believed they had chronic care services available under their current coverage is evidence of possible confusion over the coverage limits of standard Medicare SNF and home health care benefits. Interviews with representatives of the S/HMOs' TEFRA HMO competitors indicate that the way in which some of these HMOs described their Medicare SNF and home health benefits in their marketing literature conveyed the impression of more long term care coverage than was actually available. For example, HMOs correctly advertise payment in full for Medicare SNF and home health care benefits but do not effectively point out that these benefits do not include chronic care. This finding provides evidence of the difficulty S/HMOs face in positioning their product using chronic care services benefits to differentiate themselves in the marketplace.

While there is no direct way of discerning whether chronic care was not a part of the gestalt that influenced beneficiaries to join a S/HMO, there are at least three data elements indicating that the availability of chronic care services was not a leading factor in the S/HMO enrollment decision. First, at the time of the survey no more than 16 percent of S/HMO enrollees reported considering a nursing home admission as very likely in the next three years. S/HMO enrollees were, however, more likely to view themselves "at risk" of institutionalization than their HMO or fee-for-service counterparts. Second, among S/HMO enrollees, the actual use of chronic care services such as a homemaker, an adult day care center, or a visiting nurse did not exceed 3 percent across the four sites. Thus, the actual demand for these services among S/HMO members at the time the enrollment decision was made was low and was lower than the S/HMOs' projected in their demonstration protocols. Finally, the survey found that there were no statistically significant differences in Brooklyn, Long Beach, and the Twin Cities between S/HMO enrollees, HMO, and fee-for-service beneficiaries in their likelihood of considering the purchase of long-term care insurance.

In Portland, the survey found that S/HMO members were less likely than HMO and fee-for-service beneficiaries to consider purchasing long-term care insurance, although across the four demonstrations consideration of long-term care insurance was similar (i.e., Medicare Plus II, 37 percent; SHP, 39 percent; Elderplan, 41 percent; and Seniors Plus, 45 percent).

VI. Case Management In the S/HMO Demonstrations

A. What are the effects of different case management policies and practices on enrollees' eligibility and use of the S/HMOs' chronic care benefits?

In the S/HMO concept, the role and authority of the case manager was envisioned as much broader than the case manager's role in Department of Health and Human Services' supported community-based care and channeling demonstrations. In these exclusively long term care demonstrations, the case managers' role focused primarily on screening/assessment and the coordination and/or provision of community-based care. In the S/HMO, the case managers were to have primary responsibility for administering the chronic care benefit package, monitoring the use of chronic care and the budget for these services with final authority over chronic care resource allocation.

HCFA placed no restrictions on the S/HMO demonstrations concerning which members should be eligible to receive chronic care benefits. The primary reason for giving the demonstrations latitude in defining eligibility for the chronic care benefit was to test how services could best be targeted to functionally impaired enrollees within a services package that had a budgetary constraint.

Ultimately, the decision regarding eligibility for chronic care benefits was linked to the modified AAPCC reimbursement rate negotiated with HCFA. This modification paid the S/HMOs 100 percent of the modified Institutional AAPCC rate for persons certified "at risk" of Institutionalization who resided in the community (i.e., the NHC group). In conjunction with a screening/assessment process discussed below, the S/HMOs used their respective State's nursing home certification screening form to establish that a person should be classified as NHC, thus allowing the S/HMO to receive an Institutional rate of payment from HCFA for these persons.

Even though this higher rate of payment is related to higher projected acute care costs (i.e., the AAPCC represents the projected costs for standard Part A and Part B Medicare benefits if that HMO/CMP enrollee had remained in fee-for-service), it is reasonable to assume that NHC enrollees are most likely to need and receive chronic care services. However, S/HMOs could provide chronic care services to members who were not certified as NHC (i.e., enrollees who may be severely or moderately impaired but not certified "at risk" of Institutionalization).

To determine eligibility for chronic care benefits regardless of an enrollee's NHC status, each new S/HMO enrollee receives a Health Status Form (HSF) by mail which asks questions concerning the member's health status, functional limitations, prior and current use of acute and long term care services, and socio-demographic characteristics. Case managers review these forms and conduct a follow-up telephone screen to obtain missing information or clarify responses. As case management caseloads grew, telephone screens were conducted less frequently.

The HSF is used to make an initial determination about eligibility for chronic care services. At all sites, members classified as unimpaired or mildly impaired using the HSF data are not eligible for chronic care benefits or case management unless their health or functional status declines at a later date.

The final determination of chronic care services eligibility was made through case managers' use of an in-person Comprehensive Assessment Form (CAF). The CAF is a standardized interview protocol covering much of the same information as the HSF but in greater depth and breadth. The CAF is sufficiently detailed to generate the information necessary to meet the different State nursing home certification requirements of the four sites.

While the S/HMO case managers used a standardized CAF (i.e., key data items were the same at all sites), except for a small group of very disabled HSF respondents, they did not fully standardize the selection of members to whom the form was administered. At Medicare Plus II, CAFs were conducted by a case manager on all new enrollees who were bed bound or needed assistance with two or more activities of daily living as indicated by HSF responses. At the other three sites, somewhat less restrictive criteria were used (i.e., bedbound and/or one or more activities of daily living limitations).

In addition, Seniors Plus and SHP, which elected to provide chronic care benefits to moderately impaired members, were required by their demonstration protocols to complete a CAF on such persons prior to authorizing services. At all of the sites, CAFs were administered to members who a case manager judged to be in need of services after reviewing specific responses to selected HSF questions (e.g., a proxy respondent reporting that the member had severe memory loss).

Figure 9 shows the criteria each site used to determine the NHC status of their enrollees. The four demonstrations can be placed on a continuum ranging from the most restrictive to the least restrictive in determining eligibility for chronic care benefits and/or case management services. Among the four sites, Kaiser's Medicare Plus II used the most restrictive criteria for eligibility to receive chronic care benefits while SHP used the least restrictive criteria. Figure 10 summarizes this eligibility continuum.

Given the differences among the sites in the selection of eligibility criteria and in the procedures for conducting health and functional status assessments, the four S/HMOs vary considerably in the groups of S/HMO enrollees that have been permitted access to chronic care services. Table 5 shows the number and proportion of S/HMO members who were in the NHC group who were receiving chronic care services and members who received only case management services during the fourth quarters of 1985 and 1986.

Medicare Plus II projected that only 5 percent of its membership would be NHC and only NHC enrollees would receive chronic care services. By the fourth quarter 1986, the S/HMO had 4,300 members; 6.7 percent were NHC but only 4.5 percent or 67 percent were receiving chronic care services. Another 4 percent of members received case management services only (i.e., periodic monitoring). The proportion of NHC members was larger than the proportion of members receiving chronic care services for two reasons. First, the informal caregivers of some NHC members provided all needed services. Second, during the first 24 months of the demonstration there was an anomaly in the State of Oregon's NHC criteria which qualified several incontinent Medicare Plus II members as NHC who did not actually need services.

At Elderplan, the actual casemix of functionally impaired persons receiving chronic care benefits was considerably less than projected in its demonstration protocol. Elderplan projected that 13.8 percent of its members would be impaired and using chronic care services at any given time. Of the four sites, Elderplan's was the highest projected use of chronic care benefits. By the fourth quarter 1986, the S/HMO had 2,502 members; 4.1 percent were NHC and only 2.9 percent were receiving chronic care services (i.e., approximately 71 percent of NHC members were receiving chronic care services). Another 2.6 percent received only case management.

	Medicare Plus II	Elderplan	Seniors Plus	SCAN Health Plan
<u>Activities of Daily Living</u>				
Eating/Feeding	X	X	X	X
Toileting	X	X	X	
Bathing		X	X	X
Dressing and Grooming		X	X	X
Transferring	X	X	X	X
<u>Continence</u>				
Bladder Incontinence	X	X	X	
Bowel Incontinence	X	X	X	
<u>Mobility</u>				
Ambulation	X[a]	X	X	X
Wheeling	X	X	X	X
Need for Restraint	X		X	
<u>Sensory Impairment</u>				
Vision		X	X	X[b]
Hearing		X	X	X[b]
Communication		X[c]	X	X
<u>Psychobehavioral Problems</u>				
Disoriented	X	X[d]	X	X
Judgment	X	X	X	X
Regressive		X	X	X
Agitated	X	X	X	X
Restraint Order	X	X		X
Hallucination		X	X	X
Depression			X	X
Abusive	X	X	X	X
Assaultive	X	X	X	X
Wandering	X		X	X
<u>Nursing Care and Therapy[e]</u>				
Parenteral Meds		X	X	X
Inhalation Treatment		X	X	X
Oxygen		X	X	X
Suctioning		X	X	X
Ascetic Dressing		X	X	X
Lesion Irrigation		X	X	X
Cath/Tube Irrigation		X	X	X
Ostomy Care			X	X
Parenteral Fluids		X	X	X
Tube Feeding		X	X	X
Bowel/Bladder Rehabilitation		X	X	X
Bedsore Treatment		X	X	X
Indwelling Catheter		X	X	X
Other (Describe)		X	X	X
Minor Skin Care and Dressing			X	X
Intake and Output			X	X
Vital Signs Every Four Hours			X	X
Special Diet				
Health Condition ^f	X			
<u>Other Service Needs</u>				
Rehab Services			X	X
Medications	X		X	X
Skilled Therapy		X		

[a]Called 'mobility' in Medicare Plus II.

[b]Vision and hearing were combined into one item.

[c]In Elderplan, the variable was 'speech', but some of the categories were similar to those used at the other sites in the variable called 'communication.'

[d]This variable was called 'alert' in Elderplan; it is not clear how comparable it is to 'orientation.'

[e]In order to categorize any individual as nursing home certifiable, points were assigned to categories of these variables. However, each site's scoring system varied, so it was very difficult to compare total scores derived.

[f]For Medicare Plus II, this measure of the frequency of nursing assistance required is noted under health conditions including the specific nursing and therapies itemized on other site forms.

Figure 10

ELIBILITY CRITERIA FOR CHRONIC CARE BENEFITS AND CASE MANAGEMENT

	Medicare Plus II	Elderplan	Seniors Plus	SCAN Health Plan
Eligibility criteria for chronic care services	Must be Nursing Home Certifiable meeting strict criteria that result in "high" or "very high" probability of nursing home placement	Must be Nursing Home Certifiable (SNF or ICF)	Nursing Home certifiable (SNF or ICF), or moderately impaired members for whom early intervention could prevent deterioration	Eligible for admission to a SNF or ICF based on state level-of-care criteria, or "at risk" of nursing home placement based on clinical judgment, or moderately impaired members
Eligibility criteria for case management services	Any member who was moderately or severely impaired who needed monitoring or any member "at risk" due to an unstable social or medical situation	Any member who was severely impaired or "at risk" due to an unstable social or medical situation	Any member ranging from those who were severely or moderately impaired to well members who only needed information and referral	Any member who was severely or moderately impaired, and hospitalized members who were functionally independent but needed short-term case management

Most Restrictive Criteria -----> Least Restrictive Criteria

(Number and proportion of membership)

	1985			1986		
	No.	Percent of Membership	Projected Membership	No.	Percent of - Membership	Projected Membership
<u>Medicare Plus II</u>						
Nursing Home Certifiable Members	134	4.2%	5.0%	289	6.7%	5.0%
Members Receiving Chronic Care Services[a]	109	3.4	5.0	195	4.5	5.0
Members Receiving Case Management Only	178	5.6	N/A	176	4.0	N/A
Total Membership	3189			4800		
<u>Elderplan</u>						
Nursing Home Certifiable Members	58	7.5	5.0	103	4.1	13.8
Members Receiving Chronic Care Services[a]	37	4.8[b]	13.8	73	2.9[b]	13.8
Members Receiving Case Management Only	52	6.0	N/A	65	2.6	N/A
Total Membership	770			2502		
<u>Seniors Plus</u>						
Nursing Home Certifiable Members	50	11.5	4.3	122	7.2	4.3
Members Receiving Chronic Care Services[a]	60	13.8[b]	8.5	185	11.0[b]	8.5
Members Receiving Case Management Only	35	8.0	N/A	140	8.2	N/A
Total Membership	433			1688		
<u>SCAN Health Plan</u>						
Nursing Home Certifiable Members	46	4.0	4.0	114	5.5	4.0
Members Receiving Chronic Care Services[a]	100	8.7	10.0	250	12.1	10.0
Members Receiving Case Management Only	28	2.4	N/A	162	7.9	N/A
Total Membership	1142			2061		

*Source: S/HMO Demonstration Quarterly Reports, October through December, 1985 and October through December, 1986.

[a]Medicare Plus II and Elderplan did not include members who received only transportation services or durable medical equipment in their counts of members receiving chronic care services. Seniors Plus includes members who receive only transportation services. SCAN includes members who receive either/or transportation and durable medical equipment.

[b]The queue to safeguard against biased selection was being used at the end of the quarter.

Seniors Plus projected that 4.3 percent of its members would be NHC but that 8.5 percent of enrollees would receive chronic care benefits. This reflected this S/HMO's orientation of using chronic care services as a form of tertiary prevention to forestall further deterioration of moderately or severely impaired members to NHC status. By the fourth quarter 1986, the S/HMO had 1,688 members; 7.2 percent of enrollees were NHC; 11 percent of the members were receiving chronic care services; and an additional 8.2 percent of members received case management only.

SHP shared Seniors Plus' prevention-oriented chronic care services delivery strategy and projected that a larger proportion of its membership would receive chronic care services (10.0 percent) than would be NHC (4.0 percent). Similar to Seniors Plus, actual membership was more impaired than anticipated. By the fourth quarter 1986, SHP had 2,061 members; 5.5 percent were NHC; 12.1 percent were receiving chronic care services; and 7.9 percent received case management monitoring only.

B. What were the primary roles of S/HMO case managers? Did S/HMO case managers perform similarly across sites? How much did S/HMO case management cost?

A number of the roles of the S/HMO case managers were similar across sites and tended to reflect traditional long term care case management functions (e.g., assessment, care planning, and service arrangement). During the fourth quarter 1986, the average caseload per full time equivalent case manager was: Elderplan, 45; Medicare Plus II, 70; SHP, 80, and Seniors Plus, 100.

In large part, the roles, responsibilities, and authority given to the case management component of the S/HMO were determined by the organizational model. The organizational model was the key determinate of the case management department's link to the larger S/HMO delivery system:

- o The major difference in case management practices between the established HMO and long term care organization S/HMO models concerned the degree of involvement of S/HMO case managers in monitoring acute care utilization.

The two S/HMOs affiliated with existing HMOs (i.e., Medicare Plus II and Seniors Plus) chose to leave primary responsibility and control over acute care utilization (i.e., hospital and post-hospital SNF and home health care) to Kaiser and Group Health, Inc., utilization review and discharge planning staff. The long term care organizations which created new prepaid health plans (i.e., SHP and Elderplan) attempted to gain control over acute care utilization by assigning part of the utilization review and discharge planning responsibilities to the case management component of the S/HMO.

- o At all sites, the case managers were responsible for coordinating the fairly comprehensive array of institutional and community-based long term care services constituting the chronic care benefits package. All sites emphasized involving and supporting informal caregivers. Face-to-face meetings or telephone calls were conducted with caregivers to negotiate care plans, explain benefits and co-payments, clarify client needs, and work with the family to help them accept member disabilities and provide support for caregiving efforts. Most importantly, all sites had written guidelines specifying that no chronic care services could be authorized without first exploring the availability of and potential help from informal caregivers.
- o In monitoring chronic care services and allocating resources, the demonstration protocol called for case managers to recertify members as NHC every 3 months using their respective State's nursing home certification form. Case managers were also required to reassess all enrollees receiving chronic care services at 6 month intervals using a scaled-down version of the CAF. At most sites, case managers viewed formal CAF reassessment as unnecessary. Many case managers felt that their frequent contact with the enrollee and/or their family provided sufficient information for services monitoring and care planning. By the end of the second year, Medicare Plus II and SHP were on schedule in conducting CAF reassessments while case managers at Seniors Plus and Elderplan were running behind schedule.

- o At each of the sites, one of the primary roles of case managers was resource allocation -- authorizing and overseeing members' chronic care services use and costs. Because the dollar amount of chronic care resources available was capped, this task required developing a long term plan of utilization of the chronic care services to prevent the enrollee from exhausting these benefits.

To date, it appears that S/HMO case managers have been able to monitor and allocate benefits with considerable success. For example, during the fourth quarter 1986, the sites reported that only a small number of members had exhausted their benefits: SHP, 0; Medicare Plus II, 1; Elderplan, 4; and Seniors Plus, 7. (4)

Finally, Table 6 shows unaudited per member per month costs for case management. Cross-site comparisons must be interpreted cautiously because the sites varied considerably with respect to administrative, clerical, and other support staff time allocated to case management. In addition, at Medicare Plus II and Seniors Plus, reported case management costs did not include those expenses associated with services performed on S/HMO enrollees by HMO personnel such as utilization review and discharge planning.

4 Medicare Plus II has had only 1 member exhaust their chronic care services eligibility by using 100 days of nursing home care in a single spell of illness. No members have used their \$12,000. To date, 6 members had exhausted their 100 days of nursing home care over the course of their membership.

Table 6

CASE MANAGEMENT COSTS IN 1985 AND 1986

<u>Site</u>	<u>1985 Costs PMPM[a]</u>	<u>Percent of Total Budget</u>	<u>1986 Costs PMPM[a]</u>	<u>Percent of Total Budget</u>
Medicare Plus II	\$ 4.50	1.7[b]	\$ 4.50	1.6[b]
Elderplan	23.91	3.5%	9.92	2.2%
Seniors Plus	39.27	9.3	9.17	3.2
SCAN Health Plan	22.20	4.3	15.37	3.9

Source: S/HMD Demonstration Quarterly Reports, 1985, 1986. Note: These are unaudited data from the Quaterly Reports. Not all claims were submitted when these reports were prepared in November 1987.

[a] Average costs per member per month.

[b] The Medicare Plus II costs were based on the average adjusted community rate for case management during 1985 and 1986. Actual case management costs reached \$6.75 pmpm by the end of 1986.

VII. Summary and Conclusions

The findings included in this report and its technical appendices cover the 30 month period in which HCFA consented to share financial risk with the S/HMO demonstrations. This report cannot provide insights into the performance of these demonstrations in the absence of risk-sharing. For this reason, HCFA is reluctant at this time to recommend specific changes in the Medicare program that could facilitate the growth of the S/HMO concept. All four of the demonstration sites are now at full risk for the duration of the Congressionally mandated demonstration period which has been extended by the Omnibus Budget Reconciliation Act of 1987 until September 30, 1992.

This extension will permit HCFA's evaluator to examine the cost-effectiveness of the S/HMO concept with minimal consideration to differentiating the negative impacts of start-up related problems associated with new prepaid health plans from program impacts directly related to the unique organizing and financing characteristics of a S/HMO.

The ultimate test remains as to whether the S/HMOs can become financially viable organizations or product lines within larger prepaid health plan organizations now that they have had to assume full financial risk. Will the S/HMOs continue to reduce administrative costs and bring these costs into line with more established TEFRA HMOs? Will they be able to control acute care utilization and expenditures at competitive levels? Will S/HMO members become increasingly functionally impaired with increasing long-term care needs and how will the S/HMOs control chronic care expenditures within projected budgets? Extending the demonstrations affords the opportunity to examine these issues.

This report has presented findings primarily related to the operational feasibility of the S/HMO concept. The most important observations that can be made from this report are:

- o From an organizing and management perspective, developing the S/HMO concept in the context of, or in association with, a mature health maintenance organization that has evidenced a sustained growth and commitment to serving Medicare beneficiaries is less costly and administratively less complicated than having long term care providers first develop the acute care services infrastructure necessary to support S/HMO chronic care benefits. However, results of the yet to be completed cost-effectiveness analysis may modify this interim conclusion.

- o For mature HMOs that already have a TEFRA HMO or CMP contract, there appear to be two principal organizing questions: (1) how to simultaneously market more than one Medicare prepaid health plan and (2) how to integrate the chronic care services component of the S/HMO concept with existing acute care delivery systems. In its marketing approach, KP purposively minimized the problem of Medicare product competition. Seniors Plus did experience enrollment problems that can be associated with its sponsor, Group Health, Inc., dually marketing the S/HMO and a TEFRA HMO. With much concerted effort on the part of S/HMO staff, problems in services integration were not encountered.
- o Long term care organizations interested in developing the S/HMO concept need to fully understand the considerable staff and financial resources and prepaid acute health care managerial expertise that is necessary for successful S/HMO start-up. Based on Elderplan's and SHP's experience, long term care providers considering initiating a S/HMO-type venture should anticipate the need for external assistance to share the financial risks and management challenges of such an organizational innovation.
- o All S/HMOs were able to contain hospital use at or below their own budget projections, and at levels below that provided to fee-for-service Medicare beneficiaries in their communities.
- o All the S/HMOs lost substantially more money than they expected to lose during the developmental phase of this demonstration. At three sites (i.e., Elderplan, SHP, and Seniors Plus), financial losses were primarily attributable to high start-up and administrative costs, coupled with much lower than expected enrollments (i.e., considerably less revenue than projected). At KP's Medicare Plus II, losses were related to providing Medicare covered services and not to providing the S/HMO chronic care services benefits where a surplus resulted.

- o As designed and marketed, with the exception of KP, the S/HMOs experienced difficulties in competing with available prepaid health plan Medicare alternatives. Factors negatively affecting the S/HMOs' competitive position were price, limitations in advertising budgets, difficulties in developing marketing strategies that attempted to use the chronic care services component of the S/HMO benefit package to differentiate the product from high option TEFRA HMO alternatives, and an externally imposed capacity constraint on enrolling nursing home certifiable persons.
- o With the exception of Elderplan, the demonstration sites appear to have enrolled a representative cross-section of Medicare beneficiaries as evidenced by their members functional impairment levels. The percentage of severely, and especially, moderately impaired persons who enrolled in three of the four demonstrations was greater than or equal to an estimated distribution of functional impairment among fee-for-service beneficiaries in Portland, Long Beach, and the Twin Cities.
- o Compared to persons who could have enrolled in the S/HMOs but decided to join TEFRA competitors instead, based upon impairment levels, the S/HMOs appear to have experienced an adverse selection relative to their competition.

This finding has direct implications for how the availability of chronic care services affects marketing the S/HMO. Since the S/HMOs are also offering expanded services (e.g., prescription drugs, eyeglasses), to the extent that they further promote the unique chronic care benefits package as a means of differentiating themselves from TEFRA HMO competition, they risk increasing the probability of attracting disproportionate numbers of severely or moderately impaired Medicare beneficiaries (i.e., encourage adverse selection).

- o Compared to TEFRA HMO enrollees who tended to join prepaid health plans based on financial considerations, Medicare beneficiaries clearly tended to join the S/HMO to obtain more benefits.

The evaluation has no direct empirical evidence as to whether Medicare beneficiaries joining a S/HMO primarily because of additional benefits were especially attracted because of chronic care services availability or because of expanded services not covered by Medicare or available HMO alternatives (e.g., prescription drugs). However, data on the likelihood of nursing home admission and use of community-based chronic care services prior to enrollment and the likelihood of purchasing long term care insurance would seem to indicate that the availability of the chronic care services component of the S/HMO benefit package was not a primary contributor to the enrollment decision.

- o The finding that an estimated 49 to 62 percent of TEFRA HMO enrollees and 29 to 38 percent of fee-for-service Medicare beneficiaries surveyed believed they had chronic care services available under their current coverage is evidence of possible confusion over the coverage limits of standard Medicare SNF and home health benefits.
- o Given differences among the sites in the selection of eligibility criteria and in the procedures for conducting health and functional status assessments, the four S/HMOs vary considerably in the groups of S/HMO enrollees that have been permitted access to chronic care services.
- o To date, it appears that S/HMO case managers have been able to monitor and allocate chronic care benefits with considerable success. Few functionally impaired enrollees using chronic care services have exhausted these benefits. However, further analysis is needed on the relationship between the use of chronic care services and the actual clinical needs of S/HMO enrollees eligible to receive these services.
- o Levels of expenditures for S/HMO chronic care benefits result from a complex interaction between managing acute care utilization, applying assessment criteria for determining enrollees' eligibility to receive chronic care benefits, negotiating favorable payment rates for institutional and in-home chronic care services, and allocating chronic care benefits balancing the use of informal caregivers with formal services, capped by a dollar limit.

VIII. References Cited

Brown, R., A. Clemneckl, and K. Langwell (June 1987). "Medicare Beneficiaries Responses to HMO Marketing in Single and Multiple HMO Markets." Presented at the Group Health Association of America Annual Institute, Seattle, Washington.

Goran, M.J.(1981) Who Is Investing in HMOs? In Finance and Marketing in the Nation's Group Practice HMOs (Proceedings of the Annual Group Health Institute). Washington, DC: The Group Health Association, pp.36-40.

Greenberg, J.N., W.Leutz, S. Ervin, M. Greenlick, D. Kodner, and J. Seistad (December 1984). "The Social/Health Maintenance Organization and Long Term Care," unpublished paper, University Health Policy Consortium, Brandeis University.

Leutz, W., J. Greenberg, R. Abrahams, J. Prottas, L. Diamond, and L. Gruenberg (1985). Changing Health Care for an Aging Society: Planning for the Social Health Maintenance Organization. Lexington, MA:

Lewin and Associates, Inc. (1986). Determinants of HMO Success (Contract No. BHMORD-240-83-0095). Washington, D.C.: Office of Health Maintenance Organizations, U.S. Public Health Service, 1986.

CNS LIBRARY



3 8095 00012454 1